"Jnana Sangama", Belagavi-590 018



### **Project Report**

on

## "MILK QUALITY ANALYZER"

submitted in partial fulfillment of the requirements for the award of the Degree of

### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

A BHARATH 1MV20EE001
CHAITHRA K M 1MV20EE017
D S ANIL KUMAR 1MV20EE021
G SOMANATHA REDDY 1MV20EE029

Under the Guidance of

Dr R ŞIVAPRIYAN, Associate Professor Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "MILK QUALITY ANALYZER" carried out by A BHARATH (1MV20EE001), CHAITHRA K M (1MV20EE017), D S ANILKUMAR (1MV20EE021), G SOMANATHA REDDY (1MV20EE029) a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the abovementioned degree.

Signature of Gin Dr. R Sivapriyan

DEPT, OF ELECTRICAL & FLECTRONICS ENGINEErnational Airport Flood, Bangalore-562 157

SIR A VISVESVARATA INSTITUTE OF TECHNICL BY Kriar and average more, hundramore noneth (V...) Yolstwicke, Bengaturu - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. RISIVAPRIYM R. JOSUS 29/5/29 2. HD Rally many Buy 15/29

"Jnana Sangama", Belagavi-590 018



# Project Report On "E-LEARNING APPLICATION"

Submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

1MV20EE028
1MV20EE032
1MV21EE421
1MV21EE439

Under the Guidance of

Dr. R Sivapriyan, Associate Professor Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024



(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the Project work entitled "E-LEARNING APPLICATION" carried out by GANGARAJU R (1MV20EE028), HARSHITHA B P (1MV20EE032), NIKHIL G (1MV21EE421), SHEETHAL C (1MV21EE439), a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide3/05

Dr. R Sivapriyan

Signature of HOD

DE Suresh Hills

PRINCIPAL
SIX IN VISVESVIRAYA INSTITUTE OF TECHNOLOGY
Krighnodeverayanagar, Humasameranahalili
hylgmakignatura oktringipal 562 157
Prof. Rakesh S. G.

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadovarayanagar, Hunasamaranahalli
(Via) Yelaharda, Bangsluru - 552 157

#### EXTERNAL VIVA

Name of Examiners

Signature with Date

1. R. SIVAPRIYOU 2. HOKETYNANI 28/5/2L

"Jnana Sangama", Belagavi-590 018



Project Report

on

#### "DESIGN AND IMPLEMENTATION OF SMART ELECTRIC POLE FOR CHARGING ELECTRIC VEHICLES"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

ANJANA K M	1MV20EE009
CHAITHRA R	1MV20EE018
H KEERTANA	1MV20EE030
KUSUMA	1MV20EE037

Under the Guidance of

#### Mrs. P Sumalatha

Assistant professor
Department of Electrical and Electronics Engineering
Sir M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

( Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the project work entitled "DESIGN AND IMPLEMENTATION OF SMART ELECTRIC POLE FOR CHARGING ELECTRIC VEHICLES" carried out by Ms. ANJANA K M (1MV20EE009), Ms. CHAITHRA R (1MV20EE018), Ms. H KEERTANA (1MV20EE030), Ms. KUSUMA (1MV20EE037) a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Department of Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work report prescribed for the abovementioned degree.

Signature of Guide Mrs. P Sumalatha

Signature of HC Dr. Suresh H.L

PROF. & HEAD

OF THE OF THE CTRICAL & ELFOTRONICS ENGO.

IR IN THIS YESVARIATA INSTITUTE OF TECHNOLOGY

" " varay = " ag w, I fundameranahali Via, reisharina, Bergaluru - 562 157

**INTERNAL VIVA** 

Name of Examiners

1. Dr. Suresh. H.L. 2. Nagercy D.C

Signature with Date

Interna

1-27/5/24

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOL Krishpadevarayanagar, Hunasamaranaha hternalishar Albort Soat, Lacipalere-562

Prof. Rakesh S.G

"Jnana Sangma", Belagavi-590 018



#### Project Report

on

#### "IMPLEMENTATION OF HYBRID SOLAR AND WIND TURBINE USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

DISHA A PATIL	1MV20EE024
DRUTHI N	1MV20EE026
K VAMSHI KRISHNA	1MV20EE033
KETAN N BABA	1MV20EE035

Under the Guidance of

DR. C.V. MOHAN

Associate Professor,

Department of Electrical & Electronics Engineering,

Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "IMPLEMENTATION OF HYBRID SOLAR AND WIND TURBINE USING IoT" carried out by Ms. Disha A Patil-1MV20EE024, Ms. Druthi N-1MV20EE026, Mr. K Vamshi Krishna-1MV20EE033, Mr. Ketan N Baba-1MV20EE035 Bonafide students of Sir M. Visvesvaraya Institute of Technology, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above- mentioned degree.

Signature of Guide Dr. C.V. Mohan

Signature of HO Dr. Suresh H.L.

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOG Krishnadevaravanagar, Hunasamaranahalli ISIBNAGUEN PROPERTING BANGAIORE-562 157 Prof. Rakesh S.G.

PROF & HEAD dept of efforting & P. Plaschicz engg. R H. YEVESVARAYA INSTITUTE OF TECHNOLOGY Kristinscovarayanoga, Hurraamaranohalli (VIa) Yelahanka, Bengaharu - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. RiSIVAPRIYON 2. HO Ketymani

"Jnana Sangma", Belagavi-590 018



#### Project Report on "RFID-BASED SMART PETROL PUMP"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

Amruth kumar N	1MV21EE402
Ashoka K M	1MV21EE403
Chethan kumar S	1MV21EE408
Sachin s karagi	1MV21EE432

## Under the Guidance of Mrs. VIJAYALAKSHMI A.K

Assistant Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "RFID-BASED SMART PETROL PUMP" carried out by Mr. Amruth kumar N (1MV21EE402), Mr. Ashoka K M (1MV21EE403), Mr. Chethan kumar S (1MV21EE408), Mr. Sachin s karagi (1MV21EE432), Bonafide students of Sir M. Visvesvaraya Institute of Technology, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Vijayalakshmi A K Signature of HO Dr. Suresh H L PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOG Krishpadevaravar Principasamaranahalli International Akrast Siped Gangalore-562 157

DEPT, OF ELECTROPICAL & CUSCINOMICS ENGG. SIR M. VISVESVARAYA ... THISE OF TECHNOLOGY Krisingste rarayour out the manufrarancham (Via) Yeleherdia, Bengakau - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. R. SIVAPRITAN B. SED 2. HD Ketymany

29/05/12 Axold sellon

"Jnana Sangama", Belagavi-590 018



#### Project Report On

"SWART AGRICULTURAL MONITORING SYSTEM USING IOT"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

#### IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

1MV21EE401

1MV21EE419

1MV21EE420

1MV21EE430

Mr. AMARANATH S Ms. M V TEJASRI Ms. NAVYA D Mr. RITHESHKUMAR

Under the Guidance of

Mr. V RAJESH KUMAR Assistant Professor, Sir M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project work entitled "SMART AGRICULTURAL MONITORING SYSTEM USING 101" carried out by Mr. AMARNATH S (1MV21EE401), Ms. M V TEJASRI (1MV21EE419), Ms. NAVYA D (1MV21EE419), Mr. RITHESHKUMAR (1MV21EE430), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide Mr. V Rajesh Kumar

HEAD VISSISPATULE OF PHECEPHCHNOLOGY CA S ELECTERATED FIN Rakeshirs & maranahalli FIR M. VISVESVARAYA INSTITUTE AS TECHNOLOGY Road, Bangalore-562 157

wishnedovarsystems, Humanatoranahali (Ma) Yalahanka, Sangaluru - 582 167

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Sweeth. H.L. 2. Nagaraj D.C

"Jnana Sangama", Belagavi-590 018



#### Project Report on "SMART SOLAR BICYCLE"

submitted in partial fulfillment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING

IN
ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

NITEESH (1MV20EE049)
RAKESH B R (1MV20EE057)
SACHIN REDDY (1MV20EE059)
SANGAMESH T (1MV20EE060)

Under the Guidance of

Mr. Pradeep Kumar Assistant Professor, Electrical & Electronics Engineering, SIR M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157



(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "SMART SOLAR BICYCLE" carried out by Mr. NITEESH (USN 1MV20EE049), Mr. RAKESH B R (USN 1MV20EE057), Mr. SACHIN REDDY (USN 1MV20EE059), Mr. SANGAMESH T (USN 1MV20EE060), bonafide students of Sir M. Visvesvaraya Institute Of Technology, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of the project work prescribed for the above-mentioned degree.

. Pradeep Kumar

DroSuresh H.L. A.D

T OF SLECTERAL ALL FORESHIES ENGO.

STARATA THIS TITLE OF TECHNOLOGY avom Vaji. Nunasamerenenell

SIR M. VISVESVAFAYA INS Krishnadevaravananar Hunasamarana Minternalignature of Principal 19-562 157

Prof.Rakesh S G

**EXTERNAL VIVA** 

Name of Examiners

BY-JUREJH. H.L

Hn Kolymani 2.

Signature with date

II

"Jnana Sangama", Belagavi-590 018



#### Project Report

#### "Simulation and Implementation of Dual Converter"

submitted in partial fulfillment of the requirements for the award of the Degree of

### BACHELOR OF ENGINEERING

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**USHAMS** 

1MV20EE070

UTTAM AMBAPPA BHAVIMANI

1MV20EE072

**V ROHITH** 

1MV20EE074

NIKHIL MAHESH PATIL

1MV21EE422

### Under the Guidance of

Mr. Kumaraswamy R Assistant Professor Department of Electrical & Electronics Engineering Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157



(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "Simulation and Implementation of Dual Converter" carried out by Ms. Usha M S - 1MV20EE070, Mr. Uttam ambappa bhavimani - 1MV20EE072, Mr. V Rohith - 1MV20EE074, Mr. Nikhil Mahesh patil - 1MV21EE422, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

D1.P/28/5 Signature Guide Kumaraswamy R

Signature of HOD DRISOESIGHHEAD SIR M. Signarate of Principal IECHNOLOGY Krishnaderoft Rakesh S. Gsamaranahalli

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. International Airport Road, Bangalore-562 157

SIR M. VISVESVARAYA INSTITUTE OF TECHNIOLOGY

Krishnadavarayanagar (Curamamana kusali INTERNAL YIVA - 382 157

Name of Examiners

1. R. SIVAPRIYAN

2. Signature

R. Signature

2. Signature

R. Signature

2. Signature

R. Signature

2. Sign

"Jnana Sangama", Belagavi-590 018



#### Project Report

on

## "INTELLIGENT SPEED CONTROL FOR ELECTRIC VEHICLE"

submitted in partial fulfillment of the requirements for the award of the degree of

### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

BHARATH MADIVALAR CHANDU J MANOJKUMAR L 1MV20EE015 1MV20EE019 1MV21EE415

Under the Guidance of

Dr. C V Mohan,

Associate Professor.

Department of Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157



(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the project work entitled "Intelligent Speed Control For Electric Vehicle" carried out by Mr. BHARATH MADIVALAR, USN: 1MV20EE015, Mr. CHANDU J, USN: 1MV20EE019, Mr. MANOJKUMAR L, USN: 1MV21EE415, a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Dr. C V Mohan

Signature of HOD

Dr. Suresh H L

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishing feynary west five paranahalli International Airport Rosen Bangalore-562 157

PROF. & HEAD DEPT, OF ELECTRICAL & ELECTRONICS ENGI SIR M. VISVESVARAYA INSTITUTE OF TECHNICLOGY Krishnadevarayantagar, Hundsamarat Alfuel (Via) Yeleherika, Bengaluru - 802 (5)

EXTERNAL VIVA

Name of Examiners

1. R-SIVAPRIYON 2. POKETYMAN

Signature with Date

R. SR 24/3/24.

"Jnana Sangama", Belagavi-590 018



#### Project Report

on

## "MULTI FUNCTION AGRO MACHINE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

INDUMATHI K H - 1MV21EE409

PRATEEK D - 1MV21EE426

SARASWATISS - 1MV21EE435

SUHAS R KARNAM - 1MV21EE445

Under the Guidance of

Dr. Mahesh K

Professor

Department of Electrical & Electronics Engineering Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "MULTI FUNCTION AGRO MACHINE" carried out by Ms. Indumathi K H - 1MV21EE409, Mr. Prateek D - 1MV21EE426, Ms. Saraswati S S - 1MV21EE435, Mr. Suhas R Karnam - 1MV21EE445 bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the abovementioned degree.

Signature Guide Dr. Mahesh K. Signature of HOD

Dr. Suresh HELIZAD

PRINCIPAL

SM: M. VISVESVARAYA INSTITUTE OF TECHNOLO

Krishnadevarayanagar, Hunasamaranahal
International Airport Road, Bangalore-562 1

Signature of Principal Prof. Rakesh S.G.

OF ELECTRY (I. & ELECTRONICS ENGG.
MR. &. VISYESVARAYA INSTITUTE OF TECHNOLOGY
Knetinadovakayanogus, Humakatikiranahua (Via) Yalahunka, Estigaluru - 582 157

#### **EXTERNAL VIVA**

Name of Examiners

. D. SIVAPRIMAN

2. HD Kellinans

Signature with date

Dell 29/17 12



"Juana Sangama", Belagavi-591 003



#### Project Report

OIG

#### "OPTIMIZING WIND TURBINE SELECTION WITH ULTRASONIC ANEMOMETER WIND SPEED ANALYSIS"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### BACHELOR OF ENGINEERING

## IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MANU PATIL 1MV20EE041
PUNITH M R 1MV20EE054
SPOORTHI 1MV20EE067
VAIBHAVI D TANDEL 1MV20EE075

Under the Guidance of

Dr. Mahesh K
Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the project work entitled "OPTIMIZING WIND TURBINE SELECTION WITH ULTRASONIC ANEMOMETER WIND SPEED ANALYSIS" carried out by Mr. MANU PATIL - 1MV20EE041, Mr. PUNITII M.R - 1MV20EE054, Ms. SPOORTHI - 1MV20EE067, Ms. VAIBHAVI D TANDEL - 1MV20EE075, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Dr. Mahesh K

THE STREET Dr. Suresh H. Lacs 1760.

IR M. YISYESYARITH INSTITUTE OF TECHNOLOGY ecristmondumental percenture, the magazine equitions (VIS) Yakahama, Sanjakey - 582 157

**INTERNAL VIVA** 

Signature of Principal

Prof. Rakesh SICAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnedevarayana, a Hunasamaranahalli International Airport Road, Bangalore-562 157

Name of Examiners

1. R. SIVARIYAN 2. HD Kelhmani

Signature with Date

Rell recorne

"Jnana Sangama", Belagavi-590 018



#### Project Report

on

## "DEVELOPMENT OF BATTERY MONITORING SYSTEM FOR ELECTRIC VEHICLE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

DHANUSH R 1MV20EE023
SHRIKANT SAJJAN 1MV20EE064
SMITA T PATIL 1MV20EE065
SRUJANA C R 1MV20EE068

Under the Guidance of

Dr. Mahesh K
Professor

Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "DEVELOPMENT OF BATTERY MONITORING SYSTEM FOR ELECTRIC VEHICLE" carried out by Mr. Dhanush R - 1MV20EE023, Mr. Shrikant Sajjan - 1MV20EE064, Ms. Smita T Patil - 1MV20EE065, Ms. Srujana C R -1MV20EE068, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Dr. Mahesh K

PRINCIPAL SIR AL VISVÈSVARAYA INSTITUTE OF TECHNOLOGY Krishnedevareyanegar, Hunesemaranahalli International Autrer of Principalore-562 157

Prof. Rakesh S G

WEAL & ELECTRONICS ENGG. SIR M. VISYESYARAYA INSTITUTE OF TECHNOLOGY INTERNAL VIVA - 567 157

Name of Examiners

R. SIVAPRIYON HD Ketymany

Signature with Date

"Jnana Sangama", Belagavi-590 018



#### **Project Report**

on

## "SIMULATION OF REGENERATIVE BRAKING FOR ELECTRIC VEHICLE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

Mr. LIKITH GOWDA H S	1MV21EE412
Mr. MOHAMMED MAAZ	1MV21EE416
Mr. SAQEEB PASHA	1MV21EE434
Mr. SUDEEP PATIL	1MV21EE444

Under the Guidance of
Ms. Bindiya Tyagi
Assistant Professor,
Sir M.VIT, Bengaluru



## Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "SIMULATION OF REGENERATIVE BRAKING FOR ELECTRIC VEHICLE" carried out by Mr. LIKITH GOWDA HS (1MV21EE412), Mr. MOHAMMED MAAZ (1MV21EE416), Mr. SAQEEB PASHA (1MV21EE434), Mr. SUDEEP PATIL (1MV21EE444), a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the PRINCIPALE. academic requirements in respect of project work prescribed for the above-mentioned of SHE M. VISVESVARAYA INSTITUTE OF TECHNOLOG Krishnedevarayenegar, Hunssemeranahall

Signature of Guide Ms. Bindiya Tyagi

Signature of HO Dr. Suresh H L

nternational Atroot Road, Bangalore-562 15
International Atroot Road, Principal
Prof. Rakeck C. Cipal DEPT. OF ELECTRICAL & PLECTRONICS ENGO. SIG AL VISVESVARAYA INSTITUTE OF TECHNOLOGY Mishnedeversyersiger, Hungsameranottolil (Via) Yelshariks, Bengaluru - 582 187

#### **EXTERNAL VIVA**

Name of Examiners

1. Dy Swesh. H.L. 2. Nagaraj D.C.



"Jnana Sangama", Belagavi-590 018



### Project Report

## "SIMULATION AND IMPLEMENTATION OF SEPIC FED MULTILEVEL INVERTER"

submitted in partial fulfillment of the requirements for the award of the Degree of

## **BACHELOR OF ENGINEERING**

# ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

DEEKSHA S DIVYA K S MADAN GOWDA H	1MV20EE022 1MV20EE025 1MV20EE038 1MV20EE039
MALLAPPA	

Under the Guidance of

Mr. Kumara Swamy R Assistant Professor SIR M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157



(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the project work entitled "Simulation and implementation of Sepic fed multilevel inverter" carried out by Ms. DEEKSHA S, USN 1MV20EE022, Ms. DIVYA K S, USN 1MV20EE025, Mr. MADAN GOWDA H, USN 1MV20EE038, Mr. MALLAPPA, USN 1MV20EE039, a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Mr. Kumara Swamy R Dr.H. b SureshEAD

Krishnadevarr Prof. Rakesh S G

DEFT, OF ELLICTRICAL & ELECTRONICS ENGO. SIR M. VISVESYAPAYA INSTITUTE OF TECHNOLOGY Krichinidevareyannore, Historianistanistali EXTERNAL VIVA

Name of Examiners

1. Dr. Suesh. H-L 2. Nagaraj. D-C

SIR M. VISVĖSVARAYA HISTITUTE OF TELHNOL

"Jnana Sangama", Belagavi-590 018



#### Project Report

On

"SMART AGRICULTURAL MONITORING SYSTEM USING 101"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

Mr. AMARANATH S	1MV21EE401
Ms. M V TEJASRI	1MV21EE419
Ms. NAVYA D	1MV21EE420
Mr. RITHESHKUMAR	1MV21EE430

Under the Guidance of

Mr. V RAJESH KUMAR

Assistant Professor, Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project entitled "SMART AGRICULTURAL work MONITORING SYSTEM USING IOT" carried out by Mr. AMARNATH S (1MV21EE401), Ms. M V TEJASRI (1MV21EE419), Ms. NAVYA D (1MV21EE419), Mr. RITHESHKUMAR (1MV21EE430), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree

Signature of Guide Mr. V Rajesh Kumar

PRINCIPAL Dr. SEROH 12 HEAD Krishned Te fa Rakesh IS Greatmer and the True of ELECTRICAL ALTERNATION OF EL

DEPT. OF ELECTRICAL & ELECTRO NAME CON A PROPERTY ROOM, Bangalore-562 157 SIR M. VISYESVARATA HISTITUTE OF TECHNOLOGY Krishnadevarayanagæ, Humasameranahalli (Via) Yelshanks, Bengaluru - 532 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Swesh. 17-L. 2. Nagaray D-C

"Jnana Sangama", Belagavi-590 018



#### **Project Report**

On

## "AUTOMATED SEED SOWING AGRICULTURE ROBOT USING ARDUINO"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

Mr. KARTHIK K RATHOD	1MV20EE034
Mr. ABHISHEK D	1MV21EE400
Mr. BALAJI J C	1MV21EE405
Mr. MAHESH K S	1MV21EE414

Under the Guidance of

**Dr. Suresh H L**Professor & Head,
SIRMVIT, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project work entitled "AUTOMATED SEED SOWING AGRICULTURE ROBOT USING ARDUINO" carried out by Mr. KARTHIK K RATHOD (1MV20EE034), Mr. ABHISHEK D (1MV21EE400), Mr. BALAJI J C (1MV21EE405), Mr.MAHESH K S (1MV21EE414), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide Dr. Suresh H L

Signature of HOD Dr. Suresh H L

PRINCIPAL SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY Krishsadovaravarapprilitipsamaranahalli International Afrikakeshi seengalore-562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. R. SNAPRIYAN 2. HOKETYMOUG

28705/21. Red 11 21.

"Jnana Sangama", Belagavi-590 018



#### **Project Report**

on

## "SMART POWER QUALITY MONITORING AND ELECTRICITY THEFT DETECTION SYSTEM USING 10T"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

#### IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

MANJUNATH G C (1MV20EE040)
NAGARJUNA M D (1MV20EE047)
RAJATH D A (1MV20EE056)
UMASHREE R K (1MV20EE069)

Under the Guidance of

Mr. BHASKAR C
Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.



## Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "Smart Power Quality Monitoring And Electricity Theft Detection System Using Iot" carried out by Mr. Manjunath G C (USN 1MV20EE040), Mr. Nagarjuna M D (USN 1MV20EE047), Mr. Rajath D A (USN 1MV20EE056), Ms. Umashree R K (USN 1MV20EE069), bonafide students of Sir M. Visvesvaraya Institute Of Technology, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of the project work prescribed for the above-mentioned degree.

Mr. Bhaskar C

Signature of A.D. DEPT. Sureshill MEAD SIR M. VISVESVARAYA INSTITUTE OF TECHIO

Krishnadevareyendger, Hungsamac

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli

Signature of Principal 157 Prof.Rakesh S G

(Via) Yelanichia, Barbaury - 552 157 EXTERNAL VIVA

Name of Examiners

1. Dr-JUKEJH-H-L 2. AD Katymani

"Jnana Sangama", Belagavi-590 018



#### Project Report

On

#### "DESIGN OF A SIMPLE BATTERY PROTECTION SYSTEM"

Submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

ROOPESH N	1MV21EE431
SELVAN S	1MV21EE436
SHARATH KUMAR U	1MV21EE437
SRINATH KV	1MV21EE442

Under the Guidance of

#### Mrs. REKHA RADHAKRISHNAN

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru.



## Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the Project work entitled "DESIGN OF A SIMPLE BATTERY PROTECTION SYSTEM" carried out by Mr. ROOPESH N (1MV21EE431), Mr. SELVAN S (1MV21EE436), Mr. SHARATH KUMAR U (1MV21EE431), Mr. SRINATH KV (1MV21EE44), Bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Rekha Radhakrishnan

Signature of Principal ECHNOLOGY SR M. VISProf Rakesh St. Hunesamarenahalli Krishnedevaraya

DEPT, OF ELECTRICAL & ELECTRONICS ENGS. International Airport Road, Bangalore-562 157 SIR M. VISVESVAPAYA INSTITUTE OF TECHHOLOGY Kriennedeversyenager, Hunasamaianahalil

(Via Valanuska, Dengaluru - 502 157 EXTERNAL VIVA

Name of Examiners

1. DT. SURESH- HL

2. Nagaraj D.C

Signature with Date

"Jnana Sangama", Belagavi-590 018



#### Project Report

on

### "ARTIFICIAL INTELLIGENCE BASED WASTE SEGREGATION DUSTBIN SYSTEM"

Submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

ADARSH KUMAR GUPTA 1MV20EE002
AMAN KUMAR 1MV20EE005
ANAND SINGH 1MV20EE006
AVANEESH PATEL 1MV20EE012

Under the Guidance of

Dr. Suresh H L

Professor & Head Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project work entitled "ARTIFICIAL INTELLEGINCE BASED WASTE SEGREGATION DUSTBIN SYSTEM" carried out by Mr. ADARSH KUMAR GUPTA (1MV20EE002), Mr. AMAN KUMAR (1MV20EE005), Mr. ANAND SINGH (1MV20EE006), Mr. AVANEESH PATEL (1MV20EE012), bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of the project work prescribed for the above-mentioned degree.

Dr. Suresh H L

Signature of Dr. Syresh-Hal-HEAD

PRINCIPAL SIR M. VISVĖSVARAYA PUSTITUTE OF TĒCHNOLOGY Krishnodevarayanagar, Hunasamaranahaliri Indigatatatra pat (Reut Apadalora 562 167 Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Kristinadevarayonagar, HunasamerenahaW (Via) Yelahanka, Bengaluru - 562 157 **EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. R. SIVAPRIYAN 2. AD Ketymany

Dellas/21.

"Jnana Sangama", Belagavi-590 018



#### **Project Report**

On

#### "INDUSTRIAL HEAT MONITORING AND CONTROL SYSTEM USING IOT"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

### ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

AKHILLA SRK	1MV20EE004
MOHAMMED NAWAZ	1MV21EE417
POOJA K R	1MV21EE423
SUCHITHRA J	1MV21EE443

Under the Guidance of

#### Mrs. Rekha Radhakrishnan

Assistant Professor,
Dept. of Electrical & Electronics Eng.,
Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### SICM, VISVESVARAVA INSTITUTE OF TECHNOLOGY

(Affiliated to VTL). Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA1 Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project Work entitled "INDUSTRIAL HEAT MONITORING AND CONTROL SYSTEM USING IOT" carried out by AKHILLA SRK (IMV20EE004), MOHAMMED NAWAZ. (IMV21EE417), POOJA K.R. (IMV21EE423), SUCHITHRA J. (IMV31EE443), bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Rekha Radhakrishnan

SIR M. VISVESVARADA STITUTE OF TECHNO

DEPT OF FLECTRICAL & FLECTRONICS ENGS. Krishnedevarayanagar, Hunasamaranah SIR M. VII. VESVARAVA INSTITUTE OF TECHNOLOGITHER national Almort Rome, Bangalore-562 nunding reverseyans par, hunseamaranahudi

(Vin) visitatianika, liangaliau - 802-167 EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. SUREMAR.H.L

S-11- 2715/24

2. Negaray D.C

"Jnana Sangama", Belagavi-590 018



#### **Project Report**

on

#### "DEVELOPMENT OF AUTOMATIC POWER SOURCE SELECTOR"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

P.SANTHOSH USN: 1MV20EE051 S.A.HAMEED USN: 1MV20EE063 UTKARSH SINGH USN: 1MV20EE071

Under the Guidance of

Mrs. Harshithananda B

Assistant Professor

Department of Electrical & Electronics Engineering

Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "DEVELOPMENT OF AUTOMATIC POWER SOURCE SELECTOR" carried out by Mr. P.SANTHOSH - 1MV20EE051, Mr. S.A.HAMEED -1MV20EE063, Mr. UTKARSH SINGH - 1MV20EE071, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the abovementioned degree.

18 utta Signature Guide Mrs. Harshithananda B Signature of HOD

SK M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Michigan Anna Market Michigan Market Market

Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hungaamaranahalli. (Ma) Yelahanka, Sangaturu - 582 137

INTERNAL VIVA

Name of Examiners

Signature with Date

"Jnana Sangama", Belagavi-590 018



#### Project Report

on

#### "HYBRID HYDROGEN FUEL CELL ELECTRIC VEHICLE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

MOHMAD HUZEF TATARIA	1MV20EE045
V NIRANJAN	1MV20EE073
VENKATA SUSHEEL VARMA	1MV20EE076
YASHWANTH YADAV P S	1MV20EE077

Under the Guidance of

Mrs. D Beula
Associate Professor
Department of Electrical & Electronics Engineering
SIR M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "HYBRID HYDROGEN FUEL CELL ELECTRIC VEHICLE" carried out by Mr. Mohmad Huzef Tataria – 1MV20EE045, Mr. V Niranjan – 1MV20EE073, Mr. Venkata Susheel Varma – 1MV20EE076, Mr. Yashwanth Yadav P S – 1MV20EE077, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above mentioned legree.

Signature of Guide Mrs. D Beula Signature of HOD

Dr. Suresh H.L. HEAD

PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar Hypnamaranahalli
International Hypnamaranahalli
Prof. Rakesh S (Pangalore-562 157)

DEFT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR VISVESVARAYA INSTITUTE OF TECHNOLOGY
Kristinadevarayanegas, Hunesameranahakk
(Via) Yelaharika, Bangaluru - 562 157

INTERNAL VIVA

Name of Examiners

Signature with Date

1. R. SIVAPRIYON
2. H.D. Kattemani

R. 86 28/05/24

"Jnana Sangama", Belagavi-590 018



Project Report

"Simulation and Implementation of Dual Converter"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### BACHELOR OF ENGINEERING

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

1MV20EE070 USHA M S 1MV20EE072 UTTAM AMBAPPA BHAVIMANI 1MV20EE074 V ROHITH 1MV21EE422 NIKHIL MAHESH PATIL

Under the Guidance of

Mr. Kumaraswamy R Assistant Professor Department of Electrical & Electronics Engineering Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "Simulation and Implementation of Dual Converter" carried out by Ms. Usha M S - 1MV20EE070, Mr. Uttam ambappa bhavimani - 1MV20EE072, Mr. V Rohith - 1MV20EE074, Mr. Nikhil Mahesh patil - 1MV21EE422, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Kumaraswamy R

KnSignature of Principal TECHWOLOGY DE Dr. Suresh H & HEAD Internal Profil Rakesh Spangalore-562 157

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY rishnadavarayanagar, Hunasamarano Litti

INTERNAT VIVAUTU - 582 157

Name of Examiners

Signature with Date

1. R. SIVARIYAN R. SE 29/05/24.
2. HD Kellmany PKell 240

"Jnana Sangama", Belagavi-590 018



Project Report

on

# "VOLTAGE VARIATION BASED AUTONOMOUS CONTROL OF DC MICROGRID"

Submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

MD NAWAZ SHARIF KHAN	1MV20EE043
MOHITH N	1MV20EE044
PRANAV RAJ	1MV20EE052
YUVRAJ SINGH	1MV20EE078

Under the Guidance of

#### MS. P. KEZIA JOY KUMARI

Assistant Professor

Department of Electrical and Electronics Engineering,
Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project work entitled "VOLTAGE VARIATION BASED AUTONOMOUS CONTROL OF DC MICROGRID" carried out by Mr. Md NAWAZ SHARIF KHAN (1MV20EE043), Mr. MOHITH N (1MV20EE044), Mr. PRANAV RAJ (1MV20EE052), Mr. YUVRAJ SINGH (1MV20EE078), bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of the project work prescribed for the above mentioned degree.

Ms. P. Kezia Joy Kumari

Dr. Suresh HALHEAD

PRINCIPAL SR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Kristanahalli Primitaalaranahalli International APPRIARESTA Bangalore-562 157

DOPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR III VISVESVARAYA INSTITUTE OF TECHNOLOGY Kilos sadevareyerugar, Hunssamerr sassalli (Ma) Yelsharke, Sengshau - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. R. SIVARIYAN P. JOSEPANTEI.

"Jnana Sangama", Belagavi-590 018



# Project Report On "ADVANCED TRAFFIC CONTROL SYSTEM"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

Ms. MONIKA M R
Ms. SANIYA
Mr. PUNEETH C G
Mr. VENKATESH K

1MV20EE046 1MV20EE061 1MV21EE427 1MV21EE449

Under the Guidance of Dr. Suresh H L Professor & Head, SIR.MVIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project work entitled "ADVANCED TRAFFIC CONTROL SYSTEM" carried out by Ms. MONIKA M R (1MV20EE046), Ms. SANIYA (1MV20EE061), Mr. PUNEETH C G (1MV21EE427), Mr. VENKATESH K (1MV21EE449), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned begree

Signature of Guide Dr. Suresh H L

Signature of HOD Dr. Suresh H L

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Kristradevarayanagar Hunesomaranahalli hternenignature of Principal pre-562 15 Prof. Rakesh S.G

PROF. & HEAD DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnedevereyenagar, Huriasamaranahalil (Viz) Yəlahanka, Serigaluru - 582 157

**EXTERNAL VIVA** 

Name of Examiners

1. R. SIVAPRMON

2. HD Kely many

The state of the

"Jnana Sangama", Belagavi-590 018



Project Report

on

# "DESIGN AND SET UP OF A HYBRID SOLAR SEAWATER DESALINATION SYSTEM"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### BACHELOR OF ENGINEERING

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

ANIKA KUMARI 1MV20EE008 ARATI 1MV20EE011 MAYANK MANU 1MV20EE042 TUSHAR KUMAR 1MV20EE079

Under the Guidance of

Mrs. P sumalatha
Assistant Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "DESIGN AND SET UP OF A HYBRID SOLAR SEAWATER DESALINATION SYSTEM" carried out by Ms. Anika Kumari - 1MV20EE008, Ms. Arati - 1MV20EE011, Mr. Mayank Manu - 1MV20EE042, Mr. Tushar Kumar -1MV20EE079. bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Mrs. P Sumalatha Dr. Suresh H L

PRINCIPAL SIR M. VISVÈSVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Alfrerbit Britashanore-562 157

Prof. Rakesh S G

Ball Johns

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

"Jnana Sangama", Belagavi-590 018



**Project Report** 

on

# "INDUCTION MOTOR CONTROLLER AND PROTECTION SYSTEM USING IOT"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

ANSH KUMAR 1MV20EE010 RAHUL KUMAR 1MV20EE055 ROMI SHARMA 1MV20EE058 SANSKAR BHATT 1MV20EE062

Under the Guidance of

Mr. Pradeep Kumar
Assistant Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "INDUCTION MOTOR CONTROLLER AND PROTECTION SYSTEM USING IOT" carried out by Mr. Ansh Kumar - 1MV20EE010, Mr. Rahul Kumar - 1MV20EE055, Mr. Romi Sharma - 1MV20EE058, Mr. Sanskar Bhatt -1MV20EE062, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Dr. Suresh H L

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnalsvarayarayar, Ruinsipalanahalli International Application Related IB Shop lore-562 157

**INTERNAL VIVA** 

Name of Examiner

1. R. SIVAPRIYON 2. HD. Kettimang

Signature with Date

R. Petos

"Jnana Sangama", Belagavi-590 018



#### **Project Report**

OI

#### "DEVELOPMENT OF AUTOMATIC POWER SOURCE SELECTOR"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### BACHELOR OF ENGINEERING

### IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

P.SANTHOSH USN: 1MV20EE051 S.A.HAMEED USN: 1MV20EE063 UTKARSH SINGH USN: 1MV20EE071

Under the Guidance of

Mrs. Harshithananda B

Assistant Professor

Department of Electrical & Electronics Engineering

Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "DEVELOPMENT OF AUTOMATIC POWER SOURCE SELECTOR" carried out by Mr. P.SANTHOSH - 1MV20EE051, Mr. S.A.HAMEED -1MV20EE063, Mr. UTKARSH SINGH - 1MV20EE071, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the abovementioned degree.

1 Sheun Signature Guide Mrs. Harshithananda B

Dr Suresh H.L.

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasemaranahalli International Almort Road, Bangalore-562 157

Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS EMGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnedevarayanegar, Hunasamaranahalil (Via) Veleherka, Bangaluru - 582 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

They som

"Jnana Sangama", Belagavi-590 018



#### Project Report

On

### "AUTOMATIC FAULT DETECTION AND CLEARING SYSTEM IN ELECTRIC VEHICLE"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

Ms. MONIKA H Ms. RAKSHITHA R S Mr. SHIVAKUMAR Mr. SUHEB C N 1MV21EE418 1MV21EE429 1MV21EE440 1MV21EE446

Under the Guidance of

Mr. Bhaskar C Assistant Proffesor, SIR MVIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Project work entitled "AUTOMATIC FAULT DETECTION AND CLEARING SYSTEM IN ELECTRIC VEHICLE" carried out by Ms. MONIKA H (1MV21EE418), Ms. RAKSHITHA R S (1MV21EE429), Mr. SHIVAKUMAR (1MV21EE440), Mr. SUHEB C N (1MV21EE446), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

PRINCIPAL
SIGNATURE OF HOD SUBJECT OF TECHNOLOGY
Dr. Suresh H. Livie of Technology half ref Arakeshes, Gangalore-562 157

(19) Telescentes, Secretary - 582 157

EXTERNAL VIVA

Name of Examiners

- Signature with Date

1. R. SIVAPRIYON
2. HO Kelymani

R. Ste 20105 Exchange

"Jnana Sangama", Belagavi-590 018



#### Project Report

On

#### "VISION UNLOCKED: ENHANCING MOBILITY FOR THE BLIND"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

AKASH M DODDAMANE 1MV20EE003
BASAVESH G ANGADI 1MV20EE014
CHETHAN H J 1MV20EE020
KIRAN C N 1MV20EE036

Under the Guidance of

Dr. Mahesh.K Professor, Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to WTC). Belaggar improved to AETE Very Delin Assertion to TARC and VERY.

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "VISHON UNLOCKED: ENTRANCING MOBILITY

FOR THE BLAND carried out by Mr. Akash M Doddismane - IMVIOEEMS, Mr. Basavesh G Angadi, - 1MV20EE014, Mr. Chethan H J - 1MV20EE020, Mr. Kiran C N, -1MV20EEA96, bonafide students of Sir M VISVESVARAVA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Viewerraraya Technological University, Belagavi during the year 2003-2004. It is certified that all corrections suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The main Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the abovementioned degree.

SHIR RESIDENCE HEATER OF

CREEK SERRE - CORE The Hastines, Bargasti - 500

EXTERNAL VIVA

Name of Examiners

Signature with Date

2 HD Kellmani

"Jnana Sangama", Belagavi-590 018



on

# "DESIGN AND IMPLEMENTATION OF WIRELESS ELECTRIC VEHICLE CHARGING SYSTEM USING SOLAR POWER"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

## IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

B MADHU 1MV21EE404
KISHOR HASILKAR 1MV21EE411
M MOHAN KUMAR 1MV21EE413
PRAJWAL G 1MV21EE424

Under the Guidance of

Dr. Siddappaji M R
Assistant Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

THE ME A SECRETARY ASSESSED AS THE LAND OF LAND WINDOW CASA.

The section of the se

Personal of State and State and State and



#### CR. R. D. D. B. C. F. D. R.

THE REAL PROPERTY OF A STATE OF THE PARTY OF

Symmetrials

Manufact MA

Valle of States William

The second of the second

Name of Steamings

I BY THOUGH HY

2 MO Kallings

Sprainty with their

A STORY

3514 0

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "DESIGN AND IMPLEMENTATION OF WIRELESS ELECTRIC VEHICLE CHARGING SYSTEM USING SOLAR POWER" carried out by Mr. B MADHU - 1MV21EE404, Mr. Kishor R Hasilkar - 1MV21EE411, Mr. M Mohan Kumar -1MV21EE413, Mr. Prajwal G - 1MV21EE424, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Dr. Siddappaji M R

Dr. Suresh H B HEAD

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanaga dun samaranahalli Sigha tu te of Principal samaranahalli samaranahanahalli samaranahalli samaranahalli samaranahalli samaranahalli

PRINCIPAL

OF ELECTRICAL & ELECTRONICS ENGO. M. VISVESVARAYA INSTITUTE OF TECHNOLOGY shnadevarnyeneger, Hunseamarenehelli

INTERNAL VIVAL - 562 157

Name of Examiners

1. Dr. SURESH. H.L

2. HO KORMANS

Signature with Date

"Jnana Sangama", Belagavi-590 018



or

# "IOT BASED HYBRID POWER GENERATION SYSTEM UTILIZING SOLAR AND WIND ENERGY ON HIGHWAYS"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

CHETAN 1MV21EE407

JALINDAR 1MV21EE410

SHIVALINGAYYA 1MV21EE441

MAHAMMAD MAKBUL 1MV21EE450

Under the Guidance of

Ms. Priyanka Nayak
Assistant Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "IOT BASED HYBRID POWER GENERATION SYSTEM UTILIZING SOLAR AND WIND ENERGY ON HIGHWAYS" carried out by Mr. CHETAN -1MV21EE407, Mr. JALINDAR - 1MV21EE410, Mr. SHIVALINGAYYA - 1MV21EE441, Mr. MAHAMMAD MAKBUL - 1MV21EE450, bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guid Ms. Priyanka Nayak

SIRSignature of Principal maranahalli Kristpadev Rakesh S Hinasamaranahalli ECTRONICS ENGG. International Airport News, Gangalore-562 157

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevarayanagar, Hunasamaranahalli

(Via) INTERNAL VIVA 582 157

Name of Examiners

1. Dr. SHREJH. 17'L

2. AD. Kalymani

Signature with Date

Signature 20 5 2024

DX 280 124

"Jnana Sangama", Belagavi-590 018



#### Project Report

on

# " DEVELOPMENT OF SMART PREPAID ENERGY METER USING GSM AND ARDUINO UNO"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

CHANDAN R	1MV21EE406
PUNITH KUMAR T L	1MV21EE426
SUMITH H V	1MV21EE447
UDAY J	1MV21EE448

Under the Guidance of
Mr.V Rajesh Kumar
Assistant Professor
Department of Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "DEVELOPMENT OF SMART PREPAID ENERGY METER USING GSM AND ARDUINO UNO" carried out by CHANDAN R -1MV21EE406, PUNITH KUMAR T L-1MV21EE426, SUMITH H V -1MV21EE447, UDAY J-1MV21EE448 a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the abovementioned degree.

Signature Guide Mr.V Rajesh Kumar

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Signature of HOD International Australia Bull Prof. Rakesh S.G. Dr. Suresh H L PROF. & HEAD

DEPT OF ELECTRICAL & ELECTRONICS ENGO. SIZ & VISVESVARAYA INSTITUTE OF TECHNOLOGY Kristmadevarayanagar, Hunasamaranahalli (Via) Yelahanka, Bengaluru - 562 157

INTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Sweet. H.L. 2. AD Ketymanj

"Jnana Sangama", Belagavi-590 018



Project Report

or

## "SIMULATION AND IMPLEMENTATION OF SEPIC FED MULTILEVEL INVERTER"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

### IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

DEEKSHA S	1MV20EE022
DIVYA K S	1MV20EE025
MADAN GOWDA H	1MV20EE038
MALLAPPA	1MV20EE039

Under the Guidance of

Mr. Kumara Swamy R Assistant Professor SIR M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru  $-\,562157$ 

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "Simulation and implementation of Sepic fed multilevel inverter" carried out by Ms. DEEKSHA S, USN 1MV20EE022, Ms. DIVYA K S, USN 1MV20EE025, Mr. MADAN GOWDA H, USN 1MV20EE038, Mr. MALLAPPA, USN 1MV20EE039, a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide

Mr. Kumara Swamy R

DPHOFSGreifAD

SIR M. VISVĖSVARAYA INSTITUTĘ OF JECHNOLOGY Krishanda American Principal aranahalli Prof. Rakesh & Galore-562 157

DEPT. OF ELECTRICAL & ELECTRONICS ENGO. SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY Krishnudevareyanagar, Hunasameranahaili

Name of Examiners

1. Dr. Smesh HiL

2. Nagaraj P.L

"Jnana Sangama", Belagavi-590 018



Project Report

on

# "DESIGN AND IMPLEMENTATION OF SMART ELECTRIC POLE FOR CHARGING ELECTRIC VEHICLES"

submitted in partial fulfillment of the requirements for the award of the Degree of

# BACHELOR OF ENGINEERING

N.

# ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

ANJANA K M IMV20EE009 CHAITHRA R IMV20EE018

H KEERTANA 1MV20EE030

KUSUMA 1MV20EE037

Under the Guidance of

Mrs. P Sumalatha

Assistant professor
Department of Electrical and Electronics Engineering

Sir M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157 (Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Department of Electrical & Electronics Engineering



# CERTIFICATE

(IMV20EE030), Ms. KUSUMA (IMV20EE037) a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Department of Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work report prescribed for the above-Certified that the project work entitled "DESIGN AND IMPLEMENTATION OF SMART ELECTRIC POLE FOR CHARGING ELECTRIC VEHICLES" carried out by Ms. ANJANA K M (1MV20EE009), Ms. CHAITHRA R (1MV20EE018), Ms. H KEERTANA mentioned degree.

Signature of Guide Mrs. P Sumalatha

Signature of HOD 24 W

Krishnadayarayanagar, Bungsamarahali Internationaganalure of Principals 157 Internationagana Prof. Rakesh S.G PRINCIPAL SR M. VISVESVARAYA INSTITUTE OF TECHNO

SYANGTH INSTITUTE OF TECHNOLOGY Partye - per, Innesameranehalt cahering, Bergstun - 562 157 ELECTRICAL & ELECTRONICS ENGG.

# INTERNAL VIVA

Name of Examiners

1 Dr. Swadh, H.L.

2. Magazay Dr

Signature with Date

"Jnana Sangama", Belagavi-590 018



Project Report

# "AUTOMATED SEED SOWING AGRICULTURE ROBOT USING ARDUINO"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING

**ELECTRICAL & ELECTRONICS ENGINEERING** 

Submitted by

1MV20EE034

Mr. KARTHIK K RATHOD Mr. ABHISHEK D

Mr. MAHESH K S Mr. BALAJI J C

1MV21EE405 1MV21EE400

1MV21EE414

Under the Guidance of

SIRMVIT, Bengaluru. Dr. Suresh H L



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



## CERTIFICATE

(IMV20EE034), Mr. ABHISHEK D (IMV21EE400), Mr. BALAJI J C in the report deposited in the department library. The Project work report has been approved as it Certified that the Project work entitled "AUTOMATED SEED SOWING AGRICULTURE ROBOT USING ARDUINO" carried out by Mr. KARTHIK K RATHOD (IMV21EE405), Mr.MAHESH K S (IMV21EE414), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide Dr. Suresh H L

Signature of HOD Kitshington NETUTE OF TECHNOLOGY Signature of HOD Kitshington Neture PRINCIPAL

## **EXTERNAL VIVA**

Name of Examiners

Signature with Date

"Jnana Sangama", Belagavi-590 018



Project Report

"E-LEARNING APPLICATION"

Submitted in partial fulfillment of the requirements for the award of the Degree of

# BACHELOR OF ENGINEERING

ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

HARSHITHA B P GANGARAJU R NIKHIL G

SHEETHALC

1MV20EE032 1MV21EE439 1MV21EE421 1MV20EE028

Under the Guidance of

Sir M.VIT, Bengaluru. Associate Professor Dr. R Sivapriyan,



Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 1SO 9001:2008 Certified)

Department of Electrical & Electronics Engineering



## CERTIFICATE

VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the GANGARAJU R (1MV20EE028), HARSHITHA B P (1MV20EE032), NIKHIL G Certified that the Project work entitled "E-LEARNING APPLICATION" carried out by (IMV21EE421), SHEETHAL C (IMV21EE439), a bonafide students above-mentioned degree.

Signature of Guide 03/05 Dr. R Sivapriyan

Signature of HOD Dr. Suresh HL

SIR M. WSVESVARAYA INSTITUTE OF TECHNOLOGY Kristmading materie of the presentant material material or the presentant material or PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalii (Via) Yelahanka, Bengaluru - 562 157 DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

# **EXTERNAL VIVA**

Name of Examiners

Signature with Date

"Jnana Sangma", Belagavi-590 018



Project Report

"RFID-BASED SMART PETROL PUMP"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING

ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

Chethan kumar S Amruth kumar N Sachin s karagi Ashoka K M

1MV21EE403 1MV21EE408 1MV21EE432 1MV21EE402

Mrs. VIJAYALAKSHMI A.K Under the Guidance of

Department of Electrical & Electronics Engineering Sir M.VIT, Bengaluru. Assistant Professor



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 (Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Department of Electrical & Electronics Engineering



## CERTIFICATE

Certified that the project work entitled "RFID-BASED SMART PETROL PUMP" carried Visvesvaraya Institute of Technology, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the out by Mr. Amruth kumar N (1MV21EE402), Mr. Ashoka K M (1MV21EE403), Mr. Chethan kumar S (1MV21EE408), Mr. Sachin s karagi (1MV21EE432), Bonafide sudents of Sir M. Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Vijayalakshmi A K

Signature of Hon International Signature of Hone September 150 157 Prof. Rakesh S Grant September 150 157 Prof. Rakesh S Grant September 150 157 SR.M. VISVESVARAYA INSTITUTE OF TECHNOLOG Krishmadewarsyamogan, Hunasamaraman

R. SYESYARAM INSTITUTE OF TECHNOLOGY ornadevareyenger, hunasemerenahalii Visi Yalaharika, Bengalaru - 502 157 DEPT. OF TATOTRICAL & ELECTRONICS ENDS.

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

"Jnana Sangama", Belagavi-590 018



### Project Report

# "Simulation and Implementation of Battery Management System using Proteus and Arduino"

Submitted in partial fulfillment of the requirements for the award of the Degree of

# BACHELOR OF ENGINEERING

# ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SHASHIDHAR S HARSHITH K M **FAHIM KHAN BHUVAN P M** 

1MV20EE027 1MV20EE016

1MV20EE031 1MV21EE438

Under the Guidance of

Mr. Kumara Swamy R, SIR M.VIT, Bengaluru. Assistant Professor



# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Department of Electrical & Electronics Engineering

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Department of Electrical & Electronics Engineering



## CERTIFICATE

(IMV20EE016), FAHIM KHAN (IMV20EE027), HARSHITH K M (IMV20EE031), Management System using Proteus and Arduino" carried out by BHUVAN P M SHASHIDHAR S (1MV21EE438), a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all Certified that the Project work entitled "Simulation and Implementation of Battery corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the above-inentioned plegree.

Signature of Guide Mr. Kumara Swamy R

Signature of HOD hysbrights by Consideration of HOD hisbrights by Consideration of Hold has been seen and the consideration of the consideration of Hold his history and the consideration of the cons PRINCIPAL

THE R. VISVESVARAYA KISTITUTE OF TECHNOLOGY nshnedeversysrager, hunssamananahali No.) Yelehanta, Bangaku - 602 157 DEPT. OF ELECTRICAL & ELECTRONICS ENGE.

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

5

"Jnana Sangama," Belagavi-590 018



#### Internship Report on "MAINTAINANCE AND OPERATION OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

A BHARATH
USN: 1MV20EE001

Under the Guidance of

Internal Guide Dr. Mahesh K

Professor
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. T Venkatesulu naidu
Assistant Engineer
APSPDCL,
Tirupati, Andhra Pradesh



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "MAINTAINANCE AND OPERATION OF SUBSTATION" was carried out by Mr. A BHARATH USN 1MV20EE001, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements with respect to the internship work prescribed for the above-mentioned degree.

Signature of Guide

Dr. Mahesh K

SIT M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranah International Airport Read, Rangalore 562 157.

Dr. Suresh H L TROMES ENGO.

EXTERNAL VIVA

od ac in 1955 bod of 185, MING OF TECHNINOC (V.a) Yela. L. Ma. Rossaniau - 362 157

Name of Examiners

Signature with Date

1. C v mohan 2. 10 r mally p

27/5 John ,2/5/24

"Jnana Sangama," Belagavi-590 018



#### Internship Report on "AUTOMATIC QUIZ BUZZER SYSTEM"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

ADARSH KUMAR GUPTA USN: 1MV20EE002

Under the Guidance of

Internal Guide Dr. Mahesh K

Professor
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide
Mr. Ajay Poonia
Director
Evolving Edutainment Pvt. Ltd.,
Pitampura, Delhi.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "AUTOMATIC QUIZ BUZZER SYSTEM" was carried out by Mr. ADARSH KUMAR GUPTA USN 1MV20EE002, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements with respect to the internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. Mahesh K Signature of HOD

DIPSURESH H L

SIR M. VICYPS VALVE OF THE CONTROL OF THE CHNOLOGY

Krishnedevar and the control of the control

DEPT. OF ELECTRICAL & ELECTROMICS ENGO.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishned everayanagar, Nonasamaranahaki
(Vic.) Telahenka, Bengaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Madher Palati

2. Dr. Siddappost. MR

holy 29/5/24
7028 29/5/24

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

#### "STUDY ON SUBSTATION EQUIPMENTS"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

#### AKASH M DODDAMANE USN:1MV20EE003

Under the Guidance of

Internal Guide

Dr. Mahesh K

Professor,

Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide

Mr. Srikant T

Assistant Executive Engineer, KPTCL Benkikere



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "STUDY ON SUBSTATION EQUIPMENTS" carried out by Mr. AKASH M DODDAMANE USN 1MV20EE003, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya University ,Belagavi during the year 2023-2024. It is certified that all **Technological** corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship workprescribed for the above-mentioned degree.

Signature of Guide Dr. Mahesh K

Signature of HOD IPPROFESIGHEAD SIR M. VISVĚSVARAYA INSTITUTE OF TECHNOLOG Krishnadevarayanagar, Hunasamaranahalli International Aircret of Principal pre-562 157

Prof. Rakesh S G

DEPT OF ELECTRICAL & ELECTRONICS EMGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamararishalli (Via) Yolahanka, Bengeluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Cv moly 2. pr. Majurt Roly

"Jnana Sangama," Belagavi-590 01\$



#### Internship Report

"INDUSTRIAL COMMUNICATION PROTOCOLS"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

AKHILLAA S R K **USN: 1MV20EE004** 

Under the Guidance of

Internal Guide Dr. Mahesh K

Professor.

Electrical & Electronics Engineering, Sir, MVIT, Bengaluru.

External Guide Mr. Prashanth

Lead Manager, Harmonizer India Private Limited, Sunkadakatte, Bengaluru.



Department of Electrical & Electronics Engineering

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 502157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "INDUSTRIAL COMMUNICATION PROTOCOL" carried out by Ms. AKHILLAA SRK USN 1MV20EE004, a Bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. Mahesh K

PRINCIPAL SIR FUNCTION SIR FUNCTION OF TECHNOLO SIR FUNCTION OF TECHNOLO SIR FUNCTION OF THE CHINOLOGY OF TH

Krishanda rarayenagar, Nunesamarana'aaki (Ma) Yelahanka, Dengekau - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

2. Dr. Nonjundt Belog to 1/30/5/24

"Jnana Sangama," Belagavi-590 018



#### Internship Report on "ERECTION OF 33KVA INDUSTRIAL TRANSFORMER"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

AMAN KUMAR USN: 1MV20EE005

Under the Guidance of

Internal Guide Dr. Mahesh K

Professor
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide Mr. Rajesh Kumar

Director R K Electrical Pvt. Ltd., Jamshedpur, Jharkhand.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "ERECTION OF 33KVA INDUSTRIAL TRANSFORMER" was carried out by Mr. AMAN KUMAR USN 1MV20EE005, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements with respect to the internship work prescribed for the abovementioned degree.

Signature of Guide Dr. Mahesh K Signature of HOD

Dr. Suresh H L

PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.
SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Humawamaranahalii
(Ma) Yelah iaka Reporting the Assarting the As

(Via) Yelchanta, Bangaluru - 582 157 EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Madhu Palati

2. Dr. STAdaman. MR

holw 29/5/24, NR 29/5/24

TUTE OF TECHNOLOGY

Kish Signature of Principale 562 157

Memaio Por Rakesh S G

"Jnana Sangama", Belagavi-590 018



#### Internship Report on "SMART PARKING SYSTEM USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

ANAND SINGH USN: 1MV20EE006

Under the Guidance of

Internal Guide Dr. Mahesh K

Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide Ms. Spoorthi C

Director, Varcons Technologies Pvt. Ltd., Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "SMART PARKING SYSTEM USING IOT" carried out by ANAND SINGH, USN 1MV20EE006, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide

Signature of HOD Dr. Suresh H L

Signature Off Arincipal

SIR M. VISVESV PATY L. IRSTNAME OF CECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Airport Fload, Bangalore-562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Madlus Palati

2. Dr. Sidder Past-MZ

holu 29/5/24
Mr Euglstry

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

#### "BRIEF OVERVIEW OF DEPARTMENTAL PROCEDURES AND OPERATION IN BMRCL"

submitted in partial fulfillment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by
ANJANA K M
USN: 1MV20EE009

Under the Guidance of

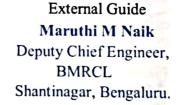
Internal Guide

Dr. Mahesh K

Professor,

Electrical & Electronics Engineering,

Sir. MVIT, Bengaluru.





Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "BRIEF OVERVIEW OF DEPARTMENTAL PROCEDURES AND OPERATION IN BMRCL" carried out by Ms. ANJANA K M, USN 1MV20EE009, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. Mahesh K

PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli Inte**Signature of Principa** Inte**Signature** of Principalore 562 157

Prof. Rakesh S G

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krichnadeverayenager, Hunesamaranahall

(Via) Yelahanka, Bangaluru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. For e v moly 2. Dr. Hajwalt Rely

"JnanaSangama", Belagavi-590018



#### Internship Report

on

#### "MACHINING, ASSEMBLY AND OPERATION OF INDUCTION MOTOR"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

#### **ANSH KUMAR**

**USN: 1MV20EE010** 

Under the Guidance of

#### Internal Guide

Dr. C V Mohan Associate Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru.

#### External Guide

Shri. Anshu Anand Dy.Manager,(Production) BHEL, Bhopal.



#### Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157
2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "MACHINING, ASSEMBLY AND OPERATION OF INDUCTION MOTOR" carried out by ANSH KUMAR USN: 1MV20EE010, a bonafide student of SIR M.VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023- 2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been in corporate in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C V Mohan

Dr. Suresh H L

SIR M. VISVĖSVAR! Krishnadevara----

TE OF TECHNOLOGY inasamaranahalli

Internation: Signature of Bringipal 62 157

Prof. Rakesh S G

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Hadlus Palati
2. Dr. Sidderpost. HR

"Jnana Sangama," Belagavi-590 018



### Internship Report on "STUDY OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
ARATI
USN:1MV20EE011

Under the Guidance of

Internal Guide
Dr.C V Mohan
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mrs. Kalyani N Madari
Assistant Executive Engineer,
110/33/11k v substation,KPTCL
South, Kalaburagi.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "STUDY OF SUBSTATION" carried out by Ms. ARATI USN 1MV20EE011, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C V Mohan Signature of HOD Dr. Suresh H L SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadayarayanacat, Hunasamaranahalli
Internation Signature of Exincipal 22 157

Prof. Rakesh S G

DEFT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishoodevarayanagar, Hunasamaranahalii

(Via) Yelahanka, Sengaluru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

John 29/5/24

1. Dr. Madlus Palati

2. Dr. Si ddoppasi. Hr

"Jnana Sangama", Belagavi-590 018



#### Internship Report on "SMART PARKING SYSTEM USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

AVANEESH PATEL USN: 1MV20EE012

Under the Guidance of

Internal Guide Dr. C V Mohan

Associate Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide
Ms. Spoorthi C
Director,
Varcons Technologies Pvt. Ltd..

Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "SMART PARKING SYSTEM USING IOT" carried out by AVANEESH PATEL, USN 1MV20EE012, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C V Mohan

Dr. Suresh H L

International Airport Road, Bangalore-562

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Machus Palati 2. Dr. Siddappost. Mr.

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

#### "STUDY ON SUBSTATION AND ITS EQUIPMENTS"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

#### **BASAVESH GADIGESH ANGADI**

**USN:1MV20EE014** 

Under the Guidance of

Internal Guide

Dr. C V Mohan

Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide Mr. Vijaya Joshi Assistant Executive Engineer, KPTCL, Ranebennur.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "STUDY ON SUBSTATION EQUIPMENTS" carried out by Mr. BASAVESH GADIGESH ANGADI, USN 1MV20EE014, a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C V Mohan

Signature of HOD

SIR M. VISVÈSVARAYA INSTITUTE OF TECHNOLOGY Sk M. 1134514khalanagar, Hunasarnaranahalli Sk Krishnadevarayanagar, Hunasarnaranahalli Interne**Signature of Principal** 562 157

Prof. Rakesh S G

DEFT, OF ELECTRICAL & PLECTRONICS ENGO.

SIR M. VISVESVARAYA HISTITUTE OF TECHNOLOGY Krishnadevarayanegar, Hunasamerenehsiii (Via) Yelahanka, Sengeluru - 582 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

"JnanaSangama", Belagavi-590018



#### Internship Report

on

#### "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT"

Submitted in partial fulfillment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

#### BHARATH MADIVALAR USN: 1MV20EE015

Under the Guidance of

#### **Internal Guide**

Dr. C V Mohan
Associate professor.
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

#### **External Guide**

Dr. Shiyappa V Sobarad Assistant engineer (Ele), GESCOM Munirabad.



#### Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157
2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT" carried out. BHARATH MADIVALR USN: 1MV20EE015, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023- 2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been in corporate in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C V Mohan Signature of HOD P. Suresh H L PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnedevarayanayar of Principa pahaili
International Alignature of Principa pahaili
Prof. Rakesin 3 Ge-562 157

SIR M. VISVESVARAYA NEUROLE OF LECTION SY Krishnadev arayana por, Honacamaranahaili (Via) Yelohanka, Bangaturu - 582 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. C. V. Mokey

2. Dr. madhy p

holus 20/24

#### Thana manaana - Danaan ah nin



#### Internation Report

### ARRATHMENTERS & BURNELLIUM FOR STATE OF STATE OF STATE OF STATES

submitted in partial fulfillment of the requirements for the award of the degree of

#### HACHIELDICUP ENGINEEURG IN ELECTRONICA ENGINEEURG

Antonitist to HILLIN ARLIE AL HARIE LALVENIE EULD

Under the Emblance of

Internal Code

III. C. V. Absban
Associate Producest
Decirled & Clectronica Empires (IIII);
St. N. V. C. Hengaloria

Paternal Empls RTr. P. Enhousenna Engls Engeloon Hengeloon



Department of Electrical & Electronica Engineering

#### SIR NEVISEVARAVA INSTITUTE OF TECHNOLOGY

(Approved by Att 1): the testif, Affiliated to VIII, Itelagast, Incremit-June Carifiel)
Off International Airport Bond, Krishnadevaraya Nagar, Bengaluru = 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "TESTING OF HKV CIRCUIT BREAKERS & SWITCHGEAR PANEL BOARDS" carried out by Mr. BHUVAN PM USN 1MV20EE016, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C V Mahan

Dr. Suresh HI

PRINCIPAL SIR M. ISTRIBUTARINA CASTACITECTOP PECHHOLOGY Krishnad Practive Radices III. Ge Generana halli International Airport Road, Bangalore-562 157

DEPT OF ELECTRICAL & FLECTRONICS ENGG. ZIK W POZNEZANSTAN INSTILLILE OL LECHNOFORT Kristin adaratoyaringar, Hunakamaranahara (Via) vurarcago, Gueraskov - 542 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. CV moly 2. Dr. Herjust Bat p

"Jnana Sangama," Belagavi-590 018



### Internship Report On "INDUSTRIAL COMMUNICATION PROTOCOLS"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

CHAITHRA K M USN: 1MV20EE017

Under the Guidance of

Internal Guide
Dr. C V Mohan

Associate Professor,
Electrical & Electronics Engineering,
Sir MVIT, Bengaluru.

External Guide
Mr. Prashanth
Lead Manager,
Harmonizer India Private Limited,
Sunkadakatte, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "INDUSTRIAL COMMUNICATION PROTOCOL" carried out by Ms. CHAITHRA K M, USN 1MV20EE017, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

W) (Signature of Guide

Dr. C V Mohan

Krishnadevarayanagar, Hunasamaranahalli Interna**Signatura ol**d, **Eringina** 562 157

PRINCIPAL SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY

Prof. Rakesh S G

PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY Kriehnadevarzyanagar, Hunezamaranahalii (Via) Yelahanks, Bengaluru - 562 157

Dr. Suresh H L

EXTERNAL VIVA

Name of Examiners

Signature with Date

1.

Dr. Ex maghin &

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

#### "BRIEF OVERVIEW OF DEPARTMENTAL PROCEDURES AND OPERATION IN BMRCL"

submitted in partial fulfillment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

CHAITHRA R USN: 1MV20EE018

Under the Guidance of

Internal Guide
Dr. C V Mohan
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Maruthi M Naik
Deputy Chief Engineer,
BMRCL
Shantinagar, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "BRIEF OVERVIEW OF DEPARTMENTAL PROCEDURES AND OPERATION IN BMRCL" carried out by Ms. CHAITHRA R, USN 1MV20EE018, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. C Mohan

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISYESYARAYA INSTITUTE OF TECHNOLOGY Krishnedevarayanagar, Hunessamorananali (Via) Yelahanka, Bongeturu - 552 157

EXTERNAL VIVA

Signature of Principal Prof. Rakesh SrG

PRINCIPAL

SIR M. VISVESVARAYA PASTITUTE OF TECHNOLOG

Krishnadevarayanago funasamaranahalli

International Airport Row Rangalore-562 157

Name of Examiners

Signature with Date

1. Por . LV milm 2. Dr. Majurath Bahr

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

#### "TRANSMMISSION AND DISTRIBUTION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
CHANDU J
USN:1MV20EE019

Under the Guidance of

Internal Guide
Mrs. D. Beula
Associate professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide Ramachandra R Assistant Executive Engineer, 220/66/11KV Receiving Station. Madhugiri, Tumkur.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "TRANSMISSION AND DISTRIBUTION" carried out by Mr. CHANDU J USN 1MV20EE019, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Mrs. D. Beula

PRINCIPAL SIR M. Signature of Principal TECHNOLOGY

FDCStireshittSAD Krishna Prof. Rakesh Signesamerenahalli
DEPT. OF ELECTRONICS ENGINEERING Angust rood, Bangalore-562 157

SIZ H. VISVESYARAYA INSTITUTE OF TECHNOLOGY Krishnudevareyoneum, Hunesamerenehalli (Vic) Yalaharka, Hanguh - 2 - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1.

Br. Wagya b 2.

Jely 2/1/24

"Jnana Sangama", Belagavi-590 018



## Internship Report

on

# "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT"

submitted in partial fulfillment of the requirements for the award of the degree of

## **BACHELOR OF ENGINEERING**

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**CHETHAN H J** 

**USN: 1MV20EE020** 

Under the Guidance of

Internal Guide Mrs. D. Beula Associate Professor Electrical & Electronics Engineering Sir MVIT, Bengaluru

External Guide Mr. Shivappa V.Sobard Assistant Engineer O&M Division GESCOM, Munirabad, Koppal



# Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT" carried out by Mr. CHETHAN H J, USN 1MV20EE020, a bonafide student of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. D Beula

DEPT. OF ELECTRICAL & ELECTRONICS ENGINternational Airport Road, Bangalore-562 15 SIR M. VISVESVARAVA INSTITUTE OF TECHNOLOGY Krishnedevarryenager, Hunasamaranahaki

(Via) Yelaharika, Bengaluru - 502 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. CV mohan 2. Dr. Manjult Bah y

"Jnana Sangama", Belagavi-590 018



# Internship Report

On

# "SUBSTATION MAINTENANCE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

NIKHIL G

**USN:1MV21EE421** 

Under the Guidance of

Internal Guide

Ms. P. Kezia Joy Kumari

Assistant Professor,

Electrical & Electronics Engineering,

Sir. MVIT, Bengaluru.

External Guide
Smt. Smitha U
Assistant Executive Engineer,
K.P.T.C.L. 220 kV
NRS Division Rajajinagar, Bangaluru.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "SUBSTATION MAINTENANCE" " carried out by Mr. NIKHIL G USN 1MV21EE421, a bonafide students of SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. P. Kezia Joy Kumari PIDr. Suresh HLD

Internation Prof. Rat

DEPT. OF ELECTRICAL & LIEGT WARTS ENGO. SIR M. VISVESVARAYA BISTULUTE OF TECHNOLOGY Krishnadevarey sasçar, H. - 3000 aranshalli (Via) Yelaharika, Bargolulu - 562 157

#### EXTERNAL VIVA

Name of Examiners

1. Dr. C.V. Mohan
2. Dr. Madhu.p

Signature with Date

"Joana Sangama", Belagavi-590 018



#### Internship Report

on

### "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT"

submitted in partial fulfillment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

#### IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
D S ANIL KUMAR
USN: 1MV20EE021

Under the Guidance of

Internal Guide
Mrs. D. Beula
Associate Professor
Electrical & Electronics Engineering
Sir MVII, Bengaluru

External Guide
Mr. Shivappa V.sobard
Assistant Engineer
O&M Division GESCOM,
Munirabad, Koppal



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

MANAGEMENT" carried out by Mr. D S ANIL KUMAR, USN 1MV20EE021, a bonafide student of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. D Beula Signature of HOD

Dr. Suresh H L

PROF. & HEAD

SIR M. WSVESVARAYA INSTITUTE OF TECHNOLOGY

Kristongharting in Principalicre-562 157

International of the Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnedevarayanagar, Hunasamaranohalli
(Via) Yelahanka, Bengsturu - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. 2. priMadha p John 27/5/201

"Jnana Sangama," Belagavi-590 018



#### **Internship Report**

on

#### "STUDY ON SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

#### DEEKSHA S USN:1MV20EE022

Under the Guidance of

Internal Guide

Mrs. D Beula

Associate Professor,
Electrical & Electronics Engineering,
Sir. M.VIT, Bengaluru.

External Guide

Mr. Lakshminarayan

Assistant Executive Engineer, Nodal officer TL&SS, KPTCL, Chikkaballapur,



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY ON SUBSTATION MAINTENANCE" carried out by Ms. DEEKSHA S USN 1MV20EE022, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Mrs. D Beula

mature of HOD

Dr. Suresh H.L.

DEFT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VICYESVARAYA INSTITUTE OF TECHNOLOGY Krishnadavarayanagar, Hunasemaranahali (Via) Yelshanka, Bengsturu - 552 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Crm. hy 2. Dr. Hajut Roly

4124 SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLO

Prof. Rakesh S G

Krishradevarayanagar, Hunasamaranaha nternatura of Rocin cipujalora-582 1

"Jnana Sangama," Belagavi-590 018



#### Internship Report on

"STUDY ON SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

DIVYA K S USN: 1MV20EE025

Under the Guidance of

Internal Guide
Mrs. D Beula
Associate Professor,
Electrical & Electronics Engineering,

Sir. M. VIT, Bengaluru.

External Guide
Mr. Lakshminarayan
Assistant Executive Engineer,

Nodal officer TL&SS, KPTCL, Chikkaballapur,



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the internship entitled "STUDY ON SUBSTATION MAINTENANCE" carried out by Ms. DIVYA K S, USN 1MV20EE025, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. D Beula Signature of HOD

Dr. Suresh H.L.D

PRINCIPAL
SYMPHYS INSTITUTE OF TECHNOLOGY

Inter Signature of Principal 19-502 157
Prof. Rakesh S G

DEPT, OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAVA INSTITUTE OF TECHNOLOGY
Krishnadovarayanagar, Hunasamaranahalii
(Via) Yelaharika, Dengaluru - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. crmiky 2. Dr. Majult RH

ATT EN ST

"Jnana Sangama," Belagavi-590 018



# Internship Report on "COMPONENT SYSTEM ENGINEERING"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
DHANUSH R
USN: 1MV20EE023

Under the Guidance of

Internal Guide
Mrs. D. Beula
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. Shiva Kumar
Senior engineer,
Simpleenergy pvt.ltd,
Yelahanka, Bengaluru.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "COMPONENT SYSTEM ENGINEERING" carried out by Mr. DHANUSH R USN 1MV20EE023, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the awardof the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. D. Beula Signature of HOD
Dr. Suresh H. L.

DIPSUICSI IN HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESYARAYA INSTITUTE OF TECHHOLOGY

Krishnadavarayanagar, Hunasamaranahaki

(VIa) Yalahanka, Bangaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. CVM·hay

2. Dr. madly 12

29.5 John 28/14

PRINCIPAL

Prof. Rakesh S. G.

hnadeyarayanegar, Hunasamaranahalli Lebhar Arport Rossi, Bargalore-562 157

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

# "OVERVIEW OF ORGANISATIONAL STUDY OF ELECTRICAL RECEIVING STATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

DISHA A PATIL USN:1MV20EE024

Under the Guidance of

Internal Guide Mrs. D Beula

Associate Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide

Mr. Rohan Prakash Dsouza
Assistant Manager,

Bharat Electronics Limited,
Jala Halli, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "OVERVIEW OF ORGANISATIONAL STUDY OF ELECTRICAL RECEIVING STATION" carried out by Ms. DISHA A PATIL USN 1MV20EE024, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Signature of Guide
Mrs. D Beula

Signature of HOD

Dr. Suresh H.L.=AD

PRINCIPAL
SIR M. VISVESYARAYA INSTITUTE OF TECHNOLO Y
Krishnadevarayanagar, Hunasamaranahali
Inter RESPECTATE CEPTE LIVE SECTION FROM PROPERTY PROP

DEPT. OF ELECTRICAL & FLECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadovarayenager, Hunasameranahali

(Via) Yelahanka, Bangaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. CVmohm 2. prmadhy p Jalu 27. 1

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

## "ELECTRICAL POWER AND CONTROL OF WHEEL AND AXLE SHOP"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by DRUTHI N 1MV20EE026

Under the Guidance of

Mrs. D Beula
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

Internal Guide

External Guide Mr. Ajit Kumar Dy CME-TQM Principal TTC, Rail Wheel Factory, Yelahanka, Bengaluru



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Delagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "ELECTRICAL POWER AND CONTROL OF WHEEL AND ANLE SHOP" carried out by Ms. DRUTHI N, USN 1MV20EE026, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. D Beula

Signature of fIOD

PRINCIPAL SIMM WSVESYARAYA INSTITUTE OF TECHNOLOG Krist**ishdayayayanat ti Hucipal**baranahalii Igarnakun**akorpraresat** Sangalura-562 157

DEPT, OF ELECTRICAL & ELECTRONICS ENGO.

SIR M. VISVESVARAVA INSTITUTE OF TECHNOLOGY

Krishnadeverayanagar, Hunadamaranahalli

(Via) Yelahanka, (Apagaluru - 532 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. cvm·hm

2. Dr. madhy p

John 2010/20

"Jnana Sangama," Belagavi-590 018



#### Internship Report on "UNDERSTANDING POWER SUB-STATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

FAHIM KHAN USN: 1MV20EE027

Under the Guidance of

Internal Guide
Dr. R. Sivapriyan
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide Mr. Vijayamohan T

Senior Maintenance Manager,
Bangalore International Airport Limited,
Devanahalli, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "UNDERSTANDING POWER SUB-STATION" carried out by Mr. FAHIM KHAN, USN IMV20EE027, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide/DV/2C Dr. R. Sivapriyan Signature of HOD
PRSFESS HEAD

PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadayarayanagar, Hunasamarar,ahadii
Internation Signature of Principal 62 157
Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIP. M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Hunasamaranahalli
(Via) Yelahanka, Bengsluru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Ov moter 2. pr. Hanjunk Rut N

Alt 25/5/4

"Jnana Sangama," Belagavi-590 018



#### Internship Report On "EMBEDDED SYSTEM AND IOT"

Submitted in partial fulfilment of the requirements for the award of the degree of

# **BACHELOR OF ENGINEERING ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by **GANGARAJU R USN: 1MV20EE028** 

Under the Guidance of

Internal Guide Dr. R Sivapriyan Associate Professor, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru.

External Guide Mr. Abdulnabi Kembavi Director, Mifratech OPC Private Ltd, Yelahanka New Town, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "EMBEDDED SYSTEM AND IOT" carried out by Mr. GANGARAJU R USN: 1MV20EE028, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. R Sivapriyan

DP.ROFSIA HEAD

SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY Krish Signature of Principale 562 157

Internation Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR AT VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunesamaranahali (Via) Yelahanka, Bangaluru - 582 157

EXTERNAL VIVA

Name of Examiners

1. Dr. C. V. Mohan 2. Dr. Madhu P

Signature with Date

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

#### "OVERVIEW OF COMBINED CYCLE POWER PLANT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

GURIJALA SOMANATHA REDDY USN:1MV20EE029

Under the Guidance of

Internal Guide
Dr. R Sivapriyan
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. Chandra Sekhar
General Manager,
KPCL,
Yelahanka, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "OVERVIEW OF COMBINED CYCLE POWER PLANT" carried out by Mr. G SOMANATHA REDDY USN 1MV20EE029, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report depositedin the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above mentioned degree.

Dr. R Sivapriyan

Signature of HOD

FIR OF FIRST HEAD

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevare /chagar, Hunasamaranahalli

Signature of Principal 62 157 Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli

(Vla) Yelahanka, Bengaluru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

Cvmohy p

John 27.5

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

# "BRIEF OVERVIEW OF DEPARTMENTAL PROCEDURES AND OPERATION IN BMRCL"

submitted in partial fulfillment of the requirements for the award of the degree of

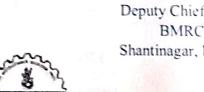
# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

H KEERTANA USN: 1MV20EE030

Under the Guidance of

Internal Guide
Dr. R Sivapriyan
Associate Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.



External Guide
Maruthi M Naik
Deputy Chief Engineer,
BMRCL
Shantinagar, Bengaluru.

Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 18O 9001 2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "BRIEF OVERVIEW OF DEPARTMENTAL PROCEDURES AND OPERATION IN BMRCL" carried out by Ms. II KEERTANA, USN 1MV20EE030, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of HO

DEPT. OF ELECTRICAL & PLECTROPICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnedeverayanagar, Hungsamaranahalli (Vla) Yelahanka, Bengeluru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

Krishanderar

SIR W. AIRAFRANKET HECHTUTE OF TECHNOLOGY

Intelli Signature of Principal Prof. Rakesh S G

1. Dr. W mohon 2. Dr. Hay'unt Roll

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

### "VEHICLE ACCIDENT MONITORING SYSTEM USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

HARSHITH K M

USN: 1MV20EE031

Under the Guidance of

Internal Guide

Dr. R Sivapriyan

Associate Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide

BABA FAKRUDDIN ALI B H

Technical Manager, NRET. Mathikere, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



# CERTIFICATE

Certified that the Internship entitled "VEHICLE ACCIDENT MONITORING SYSTEM USING

IOT" carried out by Mr. HARSHITH K M USN 1MV20EE031, a bonafide student of Sir M. VISVESVARAVA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. R Sivapriyan

Dr. Suresh H L

SIR M. VISVESVAL Kriston Signature of Thirth HMHNOLOGY Internations Profeshingship

EXTERNAL VIVA

Name of Examiners

1. DT.C.V Moham 2 Dr. Majut al

Signature with Date

"Jnana Sangama," Belagavi-590 018



# Internship Report On "EMBEDDED SYSTEM AND IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by HARSHITHA BP USN:1MV20EE032

Under the Guidance of

Internal Guide
Dr. R Sivapriyan
Associate Professor,
Electrical & Electronics Engineering
Sir. MVIT, Bengaluru.

External Guide
Mr. Abdulnabi Kembavi
Director,
Mifratech OPC Private Ltd,
Yelahanka New Town, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "EMBEDDED SYSTEM AND IOT" carried out by Ms. HARSHITHA B P. USN: 1MV20EE032, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship workprescribed for the above-mentioned degree.

Signature of Guide Dr. R Sivapriyan

K M Vi Signature of Principal 10106 Krishmede Prof. Rakesh S.G. International Airport Hood, diangain

DEPT, OF ELECTRICAL & ELECTRONICS ENGS. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadovarayanagar, Hunssamoranahasii (Via) reishanka, Bengaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. C. V. Mohan 2. Dr. Machu.p

"Inama Sampama," Bolagavi-500 018



#### Internship Report

CAR

## "STUDY OF SOLAR PHOTOVOLTAIC POWER PLANT EQUIPMENT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by K VAMSHI KRISHNA USN: 1MV20EE033

Under the Guidance of

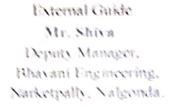
Internal Guide

Dr. R. Sivapriyan

Associate Professor.

Electrical & Electronics Engineering.

Sit. MVIT, Bengalam.





Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Dollai, Affiliated to VTU, Belagavi, ISO 9001:2008 Comford)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SOLAR PHOTOVOLTAIC POWER PLANT EQUIPMENT" carried out by Mr. K VAMSHI KRISHNA USN 1MV20EE033, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. R. Sivapriyan

SIR STEMBYEBYARAMA PRYTHTUTEROF TECHNOLOG

PROF. & FLORID CHOOL International Airport Road, Bangalore-562 15 FAVA INSTITUTE OF TECHNOLOGY CONTU - 562 157

Name of Examiners

Signature with Date

1. CV mohy 2. Dr. madlup

22 7 1. John 32/5/24

"Jnana Sangama," Belagavi-590 018



# Internship Report On "EMBEDDED SYSTEM AND IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by KARTHIK K RATHOD USN: 1MV20EE034

Under the Guidance of

Internal Guide
Dr. R Sivapriyan
Associate Professor,
Electrical & Electronics Engineering
Sir. MVIT, Bengaluru,

External Guide
Mr. Mallikarjun Kumbar
Director,
Take It Smart (OPC) Pvt Ltd,
Vijayanagar, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "EMBEDDED SYSTEM AND IOT" carried out by Mr. KARTHIK K RATHOD USN: 1MV20EE034, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of HOD Dr. Suresh HL D

1204) EIAM. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Signature, 66124Wei 1531

Prof. Rakesh S G

DEPT, OF ELECTRICAL & WESTRONICS ENGO. SIR MUNISVESVALAYA LIGHT LIG OF FELLINGI OCY Krishnadavarayonu jar, Hur asamaranahala (Via) Yeishard a. De igshuru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Siddanag.m

2. Dr. Hadhu Palati

No Emong 15/24

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

# "OVERVIEW OF ORGANISATIONAL STUDY OF ELECTRICAL RECEIVING STATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

KETAN N BABA USN:1MV20EE035

Under the Guidance of

Internal Guide
Mrs. P Sumalatha
Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.



External Guide Mr. Rohan Prakash Dsouza

Assistant Manager, Bharat Electronics Limited, Jala Halli, Bengaluru.

Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "OVERVIEW OF ORGANISATIONAL STUDY OF ELECTRICAL RECEIVING STATION" carried out by Mr. KETAN N BABA USN 1MV20EE035, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Signature of Guide Mrs. P Sumalatha

12024

Signature of HOD Dr. Suresh H.L. PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOG
Krishpedevarayanagar, Hunasamaranahali
International Autor Rock Traingelore-562 15
Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGIN

SIR M. YISTESYARAY, A INSTITUTE OF TECHNOLOGY Krishnadeverayanegar, Hunasamaranahalil (VIa) Yelahanka, Bangaluru - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. CVmohay

**b**..

br. madhup

holy ally

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

## "DEFENCE ELECTRONICS AND COMMUNICATION SYSTEM"

submitted in partial fulfilment of the requirements for the award of the degree of

## BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

KIRAN C N USN: 1MV20EE036

Under the Guidance of

Internal Guide
Ms. P Sumalatha

Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.



External Guide Mr. Balachander B

General Manager, Bharat Electronics Limited, Jalahalli, Bengaluru.

Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "DEFENCE ELECTRONICS AND COMMUNICATION SYSTEM" carried out by Mr. KIRAN C N USN 1MV20EE036, a bonafid student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. P Sumalatha

DEPT, OF ELECTRICAL & ELECTRONICS ENGS. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY. krishnadevarayonagar, Hunsazmaranahalij

(vic) Yelaherika, Bengaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. CV mohy 2. Dr. Manjanak Berky

PRINCIPAL

Prof. Rakesh S G

"Jnana Sangama", Belagavi-590 018



#### Internship Report on "STUDY OF SUBSTATION"

submitted in partial fulfillment of the requirements for the award of the degree of

## BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
KUSUMA
USN:1MV20EE037

Under the Guidance of

#### Internal Guide

Mrs. P Sumalatha
Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

#### External Guide

Mrs. Kalyani N Madari Assistant Executive Engineer, 110/33/11k v substation, KPTCL South, Kalaburagi.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION" carried out by Ms. KUSUMA INSTITUTE USN 1MV20EE037, a bonafide student of SIR M. VISVESVARAYA TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. P SUMALATHA

N202A

Signature of HOD Dr. Suresh H L

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOG Krishnedevarayanagar, Hunasamaranahalli International Airport Road, Bangalore-562 157

Prof. Rakesh S G

DEPT. OF ELECTRICAL & FLECTRONICS ENGO. SIR M. WEYESVARAMA INCIDITE OF TECHNOLOGY

PROF. & HEAD

Krishmadayarayens moranehalli (Via) Yoranurda, L.

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Hanjant Roby

"Jnana Sangama," Belagavi-590 018



## Internship Report on "STUDY OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MADAN GOWDA H USN: 1MV20EE038

Under the Guidance of

Internal Guide
Ms. P Sumalatha
Assistant Professor,
Sir. MVIT, Bengaluru.

External Guide

Assistant Executive Engineer, KPTCL Chintamani,



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION" carried out by Mr. MADAN GOWDA II, USN 1MV20EE038, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. P Sumalatha

Dr. Suresh H L PROF. & HEAD

DEPT, OF ELECTRICAL & ELECTRONICS ENGO. SHR W VISVESVARAYA INSTITUTE OF TECHHOLOGY Kidshnedevernyanager, Hunasemeranahalli (144) Yolahenka, Bengaluru - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. C. V minm 2. Dr. rujut Reby

PRINCIPAL SIR M. VISVĖSVARAYA INCTITUTE OF TECHNOLOGY Kristmadevarnyanegar, Hunesemaranahalli International Airport Rood, Bangalore-562 157

Signature of Principal

Prof. Rakesh S G

"Jnana Sangama," Belagavi-590 018



### Internship Report on "STUDY OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MALAPPA USN: 1MV20EE039

Under the Guidance of

Internal Guide
Ms. P Sumalatha
Assistant Professor,
Sir M.VIT, Bengaluru.

External Guide
Ms. Kalyani N Madari
Assistant Executive Engineer,
KPTCL Kalaburagi,



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION" carried out by Mr. MALAPPA, USN 1MV20EE039, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. P Sumalatha

107A

Signature of Dr. Suresh H L PROF. & HEAD

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunesomaranahalli Internati Signaturra ed. BSI 1981/16-562 157 Prof. Rakesh S G

DEPT, OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISYESVARAYA INSTITUTE OF TECHNOLOGY Krishradevarayanagar, Hunasamaranahalil (Via) Yelahanka, Bengaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Cvm.hm 2. or pejut Rety

"Jnana Sangama", Belagavi-590018



#### Internship Report

on

## "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT"

Submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MANJUNATH G C

USN: 1MV20EE040

Under the Guidance of

#### Internal Guide

Mrs. P. Sumalatha.
Assistant Professor.
Electrical & Flectronics Engineering.
Sir M. VIII, Bengaluru

#### External Guide

Dr. Shiyappa V Soharad Assistant engineer (Ele) GESCOM Munirabad



Department of Electrical & Electronics Engineering
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT" carried out. MANJUNATH G C USN: 1MV20EE040, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023- 2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been in corporate in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. P Sumalatha Signature of HOD Internation

Dr. (Spresh HUHEAD

Signature of Principal 2 157 Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Kristinadovarayanagar, Hunasamaraa shalif

(Via) Yelshanka, Bangaluru - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. C. V. Mohn 2. Dr. Marjutt Rely Al 28/2/28/2

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

## "ENCODERS FOR THE MEASUREMENT OF ANGLE IN LOCOMOTIVE EQUIPMENT"

submitted in partial fulfillment of the requirements for the award of the degree of

## BACHELOR OF ENGINEERING

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

MANU PATIL

USN: 1MV20EE041

Under the Guidance of

#### Internal Guide

Mrs. P. Sumalatha

Assistant Professor.
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

#### **External Guide**

Mr. V. Sadasiyan

Director (Technical), Advanced Rail Controls, Private Limited, Sahakarnagar Bengaluru.



## Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "ENCODERS FOR THE MEASUREMENT OF ANGLE IN LOCOMOTIVE EQUIPMENT" carried out by Mr. MANU PATIL, USN 1MV20EE041, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above- mentioned degree.

Signature of Guide Mrs. P. Sumalatha

A2024

Signature of Dr. Suresh H L

Internation Rate Rakesh Ban Store-562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. CV mot on 2. by master

July 20/5/24

"Jnana Sangama", Belagavi-590 018



## Internship Report On "STUDY OF SUBSTATION MAINTENANCE"

submitted in partial fulfillment of the requirements for the award of the Degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
SUCHITHRA J
USN:1MV21EE443

Under the Guidance of

Internal Guide

Mrs. Harshithananda B
Assistant Professor.
Electrical & Electronics Engineering.
Sir M.VIT. Bengaluru.

External Guide

Mr. Rudresh Assistant Executive Engineer, 220/66/11 kV Substation, Hebbal, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION MAINTENANCE" carried out by Ms. Suchithra J, USN 1MV21EE443, a bonafide student of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Blum Signature of Guide Mrs. Harshithananda B

Dr. Suresh H L

09/24 International Signature of Principal 62 157

Prof. Rakesh S G

#### EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. 10 m. m.

"Jnana Sangama", Belagavi-590 018



#### Internship Report On

## "STUDY OF OPERATION AND MAINTENANCE OF SUBSTATION"

submitted in partial fulfillment of the requirements for the award of the Degree of

## BACHELOR OF ENGINEERING

IN

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by MONIKA M R USN:1MV20EE046

Under the Guidance of

Internal Guide
Mr. KUMARASWAMY R
Assistant Professor,
Electrical & Electronics Engineering,

Sir M.VIT, Bengaluru.

External Guide
Mr. Gnanesh Raj B R
Assistant Executive Engineer.
220/66/11 kV Substation,
Madhure, Hosadurga.

Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF OPERATION AND MAINTENANCE OF SUBSTATION" carried out by Ms. MONIKA MR, USN 1MV20EE046, a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. Kumaraswamy R

Signature of HOD Dr. Suresh H L

SIR M. VISVESVARAYA INS Krisho Signature o

STITUTE OF TECHNOLOGY

Krisho Signature of Principal name International Prof. Rakesh S. Ge-562 157

PROF. & HEAD

DECT OF ELECTRICAL & ELECTROPICS ENG.

SIR & "CHEVARAVA INSTITUTE OF TECHNOLOGY

Kris marin uravaningar, Hunashmaranahatti (viu) v. arianka, dengaharu - Sož 187

(val, 1 Landian, Gengardio - Lot 10

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Madhu Palati

2. Dr. Sidepran.M.

John 29/1/24

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

## "Stockport-Predictive Sentiment Analysis"

submitted in partial fulfilment of the requirements for the award of the degree of

## BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

NAGARJUNA M D USN:1MV20EE047

Under the Guidance of

Internal Guide
Mr. Kumaraswamy R
Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide

Ms. Spoorthi C

Director,

Varcons Technologies Pvt. Ltd.

Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "Stockport-Predictive Sentiment Analysis" carried out by Mr. NAGARJUNA M D USN 1MV20EE047, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

wr.P/.30/4/2024 Signature of Guide Mr. Kumaraswamy R

Signature of HOD

Dr. Suresh H L

PROF. & HEAD

DEPT. OF ELECTROLAUT SUICES GROSS EMSG. SIRMA VISVESVARAVA DICTIVIDA E DE TEGRADECAY Krishnedeverbyenager, Hur acemaranahelli shardle, Bangaluru - 552 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

CV mohan Dr. May'nto Rah y

the 2815

SIR M. VISVESVAR

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "STUDY ON SOLAR POWER PLANT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

**NITEESH** 

**USN: 1MV20EE049** 

Under the Guidance of

#### Internal Guide

Mr. Kumaraswamy R
Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

#### External Guide

Mr. Rakesh C Plant Incharge, N7 Energy Solutions, Bemalkeda, Bidar.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY ON SOLAR POWER PLANT" carried out by Mr. NITEESH, USN 1MV20EE049, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. Kumaraswamy R

DEPT, OF ELECTRICAL & FLECTRONICS ENGO. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadavarayanagar, Hunsaamaranahülli (Vis) Yelsharks, Eungaiuru - 582 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

or Honjut Boly

PRINCIPAL SIR M. VISVESVARAYA I STITUTE OF TECHNOLO Krishnadevarayanagar, Hunasamaranahal International Airport Road Banalore-562 15
Signature of Principal Principal

Prof. Rakesh S G

"Jnana Sangama", Delagavi-590 018



#### Internship Report

on

## "SUPPLY MANAGEMENT AND BASICS OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by PUNITH M R USN: 1MV2010054

Under the Guidance of

Internal Guide

Ms. Bindiya Tyagi

Assistant Professor Lifetiment & Lifetimenes Lingineering Sir MAVIL Bengahiru. **External Guide** 

Mrs. Suchita Lugun.

Assistant Executive Engineer Nodal officer KPTCI Doddaballapura.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Internship work entitled "SUPPLY MANAGEMENT AND BASICS OF SUBSTATION" carried out by Mr. PUNITH M R, USN: 1MV20EE054 bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship work report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the above-mentioned degree.

Ms. Bindiya Tyagi

Signature of HOD

Dr. Stiresh H. LEAD

DEFT. OF ELECTRICAL A ELECTRONICS ENGG. SIR M. VISVESY ADATA DISTRIVITE DE RECHACEDO Krishnadavarayenerper, Humbea trivianahadi

Maj Yeararks, Bergaluru - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

PRINCIPAL SIR M. VISVESVARALA POSTITUTE OF TECHNOLOGY

Internal Signature of Principal

Prof. Rakesh S G

Krishnadevarariani

masamaran.al alli

br. mach p

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

## EMBEDDED SYSTEM ("SMART PARKING SYSTEM USING IOT")

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

## ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

RAHUL KUMAR USN:1MV20EE055

Under the Guidance of

Internal Guide
Mrs. Bindiya Tyagi
Assistant Professor,
Electrical & Electronics Engineering,

Sir M.VIT, Bengaluru.

External Guide

Ms. Spoorthi C

Director,

Varcons Technologies Pvt. Ltd.,

Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AKTE New Deltii, Affiliated to VTU, Belagavi, ISO 9001-2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled EMBEDDED SYSTEM ("SMART PARKING SYSTEM USING [OT] carried out by RAHUL KUMAR, USN-IMV20EE055, a bonafide student of SIR M. VISVESVARAYAINSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Bindiya Tyagi Signature of HOL

Dr. Suresh H L

PROF & HEAD TO BE DEPOSITE BETTY/HIS ENGO

CONTRACT A HISTORY OF TECHNOLOGY ermager, Hurademan, refreitt AN, BUNGALAU - 562 157

EXTERNALVIVA

Name of Examiners

Signature with Date

1. Dr. Modly Poloti 2. Dr. Siddorfa JAR

John 29/5/24

SIR H. VISVESVERICE Y toll portagintary

PPINCIPAL

Signature of Principal 52 15

Prof. Pakesh & G

STITUTE OF TECHNOLOGY

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

## "Stockport-Predictive Sentiment Analysis"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

RAJATH D A USN:1MV20EE056

Under the Guidance of

Internal Guide
Mrs. Bindiya Tyagi
Assistant Professor,
Electrical & Electronics Engineering,

Sir M.VIT, Bengaluru.

External Guide

Ms. Spoorthi C

Director,

Varcons Technologies Pvt. Ltd,

Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "Stockport-Predictive Sentiment Analysis" carried out by Mr. RAJATH D A USN 1MV20EE056, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Mrs. Bindiya Tyagi

DP. Bureshill EAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGO. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnedev.weywneger, Husewamaronshalli

(Ma) Yelahanka, Sangaturu - 562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

SIR M. VISVESVARAYA PASTITUTE OF TECHNOLO Krishnedevarayan agan, Hunasamaranahal In Signature of Principal alore-562 1

Prof. Rakesh S G

1. CV mohan 2. Dr. Majul C Rol 1

"Jnana Sangama", Belagavi-590 018



## Internship Report

On

## "STUDY OF OPERATION AND MAINTENANCE OF SUBSTATION"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

RAKESH B R USN:1MV20EE057

Under the Guidance of

Internal Guide

Mrs. Bindiya Tyagi
Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide

Mr. Girisha Bestara Assistant Executive Engineer, 220/66/11 kV Substation, Sira, Madhugiri



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF OPERATION AND MAINTENANCE OF SUBSTATION" carried out by Mr. Rakesh B R, USN 1MV20EE057, a bonafide student of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academicrequirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Bindiya Tyagi

Dr. Suresh H LEAD

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishmadevarayanagar, Hunesamaranahalli Signature of HOD Signature of Principal

PRINCIPAL

Prof. Rakesh S G

MACIADO Y IL DEECTRONICS ENGO. SIR RELYCE LEGISLATA INSTITUTE OF TECHNOLOGY kuistion coverer, ranges, it ium accomeranatia ili (Vla) Yelcharas, Bengelau - 862 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

"Jnana Sangama", Belagavi-590 018



#### Internship Report

"SMART PARKING SYSTEM USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

## BACHELOR OF ENGINEERING

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

SANGAMESH T

**USN: 1MV20EE060** 

Under the Guidance of

Internal Guide Mrs. Bindiya Tyagi

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru.

External Guide Ms. Spoorthi C

Director. Varcons Technologies Pvt. Ltd., Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "SMART PARKING SYSTEM USING IOT" carried out by SANGAMESH T, USN 1MV20EE060, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Mrs. Bindiya Tyagi

Dr. Suresh H L

PRINCIPAL SIR M. VISVESVAR MAN MESTITUTE OF TECHNOLOGY Krishno Signature of Exincipal Analli International Apres / Rakesingslote-562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. CV mohan Cut 2. M. Mujult Roll /

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

### EMBEDDED SYSTEM ("SMART PARKING SYSTEM USING IOT")

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

SANIYA

**USN:1MV20EE061** 

Under the Guidance of

Internal Guide

Ms. Bindiya Tyagi

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide

Ms. Spoorthi C

Director,

Varcons Technologies Pvt. Ltd., Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled EMBEDDED SYSTEM CSMART PARKING SYSTEM USING (O17) carried out by SANIYA, USN1MV20EE061, a bonafide student of SIR M. VISVESVARAYA INSTITUTEOF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Ms. Bindiya Tyagi

Dr. Suresh H I PROF. & HEAD PRINCIPAL

SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLO Krishnadevarayanegar, Hunesamaranahall Interna Significare Post Pangalog -562 15

Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTROPHIS ENGG.

SHE IL VISVESVARAVA MISTITUTE OF TECHNOLOGY

Krizinadevarayanegar, Humasamaranahalii (ia) Yelahanks, Bangaluru - 582 157

**EXTERNALVIVA** 

Name of Examiners

Signature with Date

1. Dr. Madhu Palati

2. Dr. Siddlandr.M.

holy 29/5/24 MRB 29/5/24

"Jnana Sangama", Belagavi-590 018



#### Internship Report

Of

## EMBEDDED SYSTEM ("SMART PARKING SYSTEM USING IOT")

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

SANSKAR BHATT

**USN:1MV20EE062** 

Under the Guidance of

Internal Guide Mr. Bhaskar C

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide Ms. Spoorthi C

Director, Varcons Technologies Pvt. Ltd., Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled EMBEDDED SYSTEM ("SMART PARKING SYSTEM USING IOT") carried out by SANSKAR BHATT, USN-1MV20EE062, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide

Signature of HOD Dr. Suresh H L

PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGO.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Kristmadoverayanoger, Hungsamaranahalili

(V.u.) Yelaharka, Bengaluru - 562 157

**EXTERNALVIVA** 

Name of Examiners

Signature with Date

PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Wishnadevarayanagar, Hunasamaranahalii

Internation Signature of Principal

Anternation Signature of Principal

Prof. Rakesh S G

1. Dr. Madhu Palati

2. Dr. Siddaron. Mr

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

#### "MANUFACTURING, ASSEMBLING AND TESTING OF 11kV CIRCIUT BREAKERS AND SWITCHGEAR PANEL BOARDS"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
SHRIKANT SAJJAN
USN:1MV20EE064

Under the Guidance of

Internal Guide
Mr. BHASKAR C
Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide Mr. DAWOOD BEIG

Quality and Assurance Department, My sore Electrical Industries, Yashwanthpur, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



## **CERTIFICATE**

Certified that the internship entitled "MANUFACTURING, ASSEMBLING AND TESTING OF 11kV CIRCUIT BREAKERS AND SWITCHGEAR PANEL BOARDS" carried out by Mr. SHRIKANT SAJJAN USN 1MV20EE064, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the awardof the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. Bhaskar C

Dr. Suresh H L

Signature of Principal Intern Prof. Rakesh S. G. ngalore-562 157

**EXTERNAL VIVA** 

Name of Examiners

1.

Signature with Date

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

## "MANUFACTURING, ASSEMBLING AND TESTING OF 11kV CIRCIUT BREAKERS AND SWITCHGEAR PANEL BOARDS"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SMITA T PATIL USN:1MV20EE065

Under the Guidance of

Internal Guide
Mr. BHASKAR C
Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru

External Guide
Mr. Dawood Beig
Quality and Assurance Department,
Mysore Electrical Industries,
Yeshwanthpur, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "MANUFACTURING, ASSEMBLING AND TESTING OF 11kV CIRCUIT BREAKERS AND SWITCHGEAR PANEL BOARDS" carried out by Ms. SMITA T PATIL USN 1MV20EE065, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree

Signature of Guide

Mr. Bhaskar C

Signature of HOD

Dr. Suresh HL

PRINCIPAL
SIZM MSVESYARAYA INSTITUTE OF TECHNOLOGY
Krishredevarayanagan, Hunssamaranananal
International Airport Road, Baselinetipal 157
Signature of Principal 157

Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.
SIR M. VISVESYARATA INSTITUTE OF TECHNOLOGY
Knohnedevarayeneger, Hunecameranahr 3
(Aa) Yelaharika, Bengeluru - 512 157

EXTERNAL VIVA

Name of Examiners

1. C.A. Waha

2 Drmidly P

Signature with Date

John 2/5/24

"Jnana Sangama", Belagavi-590 018



### Internship Report

on

### "SUPPLY MANAGEMENT AND BASICS OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

SUBMITTED BY SPOORTHI USN:1MV20EE067

Under the Guidance of

#### Internal Guide

Mr. Bhaskar C

Assistant Professor

Electrical & Electronics Engineering
Sir. M.VIT, Bengaluru.

#### External Guide

Mrs. Suchita Lugun

Assistant Executive Engineer Nodal officer KPTCL Doddaballapura.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the Internship work entitled "SUPPLY MANAGEMENT AND BASICS OF SUBSTATION" carried out by Ms. SPOORTHI USN 1MV20EE067, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship work report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the above-mentioned degree.

Mr. Bhaskar C

Signature of HO DrP和@新见HEAD

DEPT, OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanegor, Hungsamaranai ad (Via) Yelaharaka, Bengeluru - 502 157 EXTERNAL VIVA

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli Internati Signature of Principal

Prof. Rakesh S G

Name of Examiners

Signature with Date

"Jnana Sangama," Belagavi-590 018



### Internship Report

on

# "SUPPLY MANAGEMENT AND BASICS IN SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by SRUJANA C R USN:1MV20EE068

Under the Guidance of

Internal Guide Mr. Bhaskar C

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide

Ms.Suchita Lugun

Assistant executive officer,

Nodal Officer KPTCLL,

Doddaballapura.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "SUPPLY MANAGEMENT AND BASICS IN SUBSTATION" carried out by Ms. SRUJANA C R USN 1MV20EE068, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. Bhaskar C

Signature of HOD Dr. Suresh H.L.

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnodevasivanarar Eure Principal International Air

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadavarayanagar, Hunasamaranahalil (Via) Yelpharska, Bengaluru - 502 157

EXTERNAL VIVA

Name of Examiners

1. Dr. C.V. Mohan 2. Dr. Machu P

Signature with Date

John 2 27 3

"Jnana Sangama", Belagavi-590 018



### **Internship Report**

on

# "STOCKPORT PREDICTIVE SENTIMENT ANALYSIS USING MACHINE LEARNING"

submitted in partial fulfillment of the requirements for the award of the degree of

### **BACHELOR OF ENGINEERING**

IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

UMASHREE R K USN: 1MV20EE069

Under the Guidance of

Internal Guide

Mr. Bhaskar C Assistant Professor Electrical & Electronics Engineering, Sir M.VIT, Bengaluru External Guide

Mrs. Spoorthi H C Director Varcons technologies Pvt.Ltd Ulsoor, Bengaluru



Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023-24

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "Stockport predictive sentiment analysis using machine learning" carried out by Ms. Umashree R K, USN 1MV20EE069, a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Signature of Guide

Mr. Bhaskar C

BITSUALS HEFETRONICS ENGINEERING SIGNATURE OF PRINCIPAL-562 157

SIR M. VISVESVAL

CIPAL TUTE OF TECHNOLOGY Krishnodevarayar Lgur, Hunasamaranahalli

Prof. Rakesh S G

SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY

Krishnedeversyanagar, Hunssamaranahali (Ma) Yelahanka, Bengaluru - 582 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

Dr. Herjutt bah

ii

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

#### "TEMPLATE FOR TECH STARTUP LANDING PAGE"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
USHA M S
USN: 1MV20EE070

Under the Guidance of

Mr. Bhaskar C
Assistant Professor,
Electrical & Electronics Engineering
Sir M.VIT, Bengaluru

Internal Guide

External Guide
Mrs. Spoorthi C
Director,
Varcons technology Pvt Limited,
MG Road, Ulsoor, Bengaluru



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the internship entitled "TEMPLATE FOR TECH STARTUP LANDING PAGE" carried out by Ms. USHA M S USN 1MV20EE070, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. Bhaskar C

Signature of HOD

PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.
518 M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

evarzyensger, Hunasamarana\* - sahakke, Bengaluru - 502 % s

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. C.V. Mohan

2. Dr. Macher p

heliu s/24

Kaken Aime of Lechnord

International Airport Ross, Bangalore-562 15

Hunasamaranahal

"Jnana Sangama", Belagavi-590 018



### Internship Report

on

### "STUDY AND MAINTENANCE OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

### UTTAM AMBAPPA BHAVIMANI USN:1MV20EE072

Under the Guidance of

Internal Guide Dr. Siddappaji M R

Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide
Mr. S R Hajeri
Assistant Executive Engineering,
Nodal Officer KPTCL,

Vijayapura.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "STUDY AND MAINTENANCE OF SUBSTATION" carried out by Mr. UTTAM AMBAPPA BHAVIMANI USN 1MV20EE072, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the internship report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Dr. Siddappaji M R

Dr. Suresh H.L.

International Portion Ricos IBangalore-562 157

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahali (Via) Yelahanka, Bengaluru - 562 157

EXTERNAL VIVA

Name of Examiners

1. Dr. C.V. Mohan

2. Dr. Madhu, P

Signature with Date

"Jnana Sangama," Belagavi-590 018



### **Internship Report**

on

# "TEMPLATE FOR TECH STARTUP LANDING PAGE"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by V NIRANJAN USN: 1MV20EE073

Under the Guidance of

Internal Guide
Dr. Siddappaji M R
Assistant Professor,
Electrical & Flectronics Engineering
Sir. M.VIT, Bengaluru

External Guide

Mrs. Spoorthi C

Director,

Varcons Technology Pvt.Limited

MG Road, Ulsoor, Bengaluru



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the internship entitled "TEMPLATE FOR TECH STARTUP LANDING PAGE" carried out by Mr. V NIRANJAN USN 1MV20EE073, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

HRECOSylving Signature of Guide Dr. Siddappaji M R

PRINCIPAL SIR M. VISTERMARKING SITT THE TOTAL CHUOLOGY Krishnodev Prof Rakes Psargaranahalli International Airport Rose, Bangalore-562 157

DEPT, OF ELECTRICAL & ELECTRONICS ENGS. SIR M. VISVESVARAVA INSTITUTE OF TECHNOLOGY Krishnadev srayanoger, Hunasamaranahalil (Via) Yelahanka, Bangaluru - 552 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Madhu Palati

2. Dr. Siddanpa Dr. TUZ

hehry 29/5/24 102 Barialstry

"Jnana Sangama," Belagavi-590 018



### Internship Report

on

# "SENTIMENT ANALYSIS OF LOCKDOWN IN INDIA DURING COVID-19 A CASE STUDY"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

V ROHITH USN: 1MV20EE074

Under the Guidance of

Internal Guide
Dr. Siddappaji M R

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide Mr. Nithin K S

Project Manager, Compsoft Technologies, Rajajinagar, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VIU, Belagavi, 150 9001-2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "SENTIMENT ANALYSIS OF LOCKDOWN IN INDIA DURING COVID-19 A CASE" carried out by Mr. V ROHITH USN 1MV20EE074, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report depositedin the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. Siddappaji M R

Signature of Dr Syresh H. L. AD SIR M. VISVĖSVARAYA INSTITU Krishred Signature of Printiplogy rternational A Prof. Rakashalofe. 562 157

DEVIL OF ELECTRICAL & FLECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadayarayanagar, Hunasamoranahalli (Via) Yelahanka, Bor galuru - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. CV mohay 2. Dr. Malhy 7

Jehn 2/1/24

"Jnana Sangama", Belagavi-590 018



### Internship Report

on

# "ROTATIONAL SPEED SENSORS USED IN THE TRACTION MOTORS FOR THE CONTROL OF ELECTRIC LOCOMOTIVES"

Submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
VAIBHAVI D TANDEL
USN: 1MV20EE075

Under the Guidance of

#### **Internal Guide**

Dr. Siddappaji M.R.

Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

#### **External Guide**

Mr. V Sadashiyan

Director (Technical) Advanced Rail Controls Pvt. Ltd, Sahakarnagar, Bengaluru.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "ROTATIONAL SPEED SENSORS USED IN THE TRACTION MOTORS FOR THE CONTROL OF ELECTRIC LOCOMOTIVES" carried out by Ms. VAIBHAVI D TANDEL, USN 1MV20EE075, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above- mentioned degree.

Dr. Siddappaji M.R.

Signature of HOD Dr. Suresh H L

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. C.V. Mohau

2. Dr. Madlus P

Signature with Dance

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

# "SENTIMENT ANALYSIS OF LOCKDOWN IN INDIA DURING COVID-19 A CASE STUDY"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

VENKATA SUSHEEL VARMA USN: 1MV20EE076

Under the Guidance of

Internal Guide Dr. Siddappaji M R

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide Mr. Nithin K S

Project Manager, Compsoft Technologies, Rajajinagar, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "SENTIMENT ANALYSIS OF LOCKDOWN IN INDIA DURING COVID-19 A CASE" carried out by Mr. VENKATA SUSHEEL VARMA USN 1MV20EE076, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guid Dr. Siddappaji M R

Por Suresh HAD DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadovarayanagar, Hunasamaranahalii (Vio) Yelahanka, Bengaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY PRINCIPAL

Krishnedevareyanegar, Munesamarafiahalli International Arport P. Principal 562 157
Signature of Principal 562 157

helm 29/5/24 MRBen 29/5/24

1. Dr. Madher Palati 2. Dr. Siddal Mast. MR

"Jnana Sangama," Belagavi-590 018



### Internship Report

on

# "SENTIMENT ANALYSIS OF LOCKDOWN IN INDIA DURING COVID-19 A CASE STUDY"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

YASHWANTH YADAV P S USN: 1MV20EE077

Under the Guidance of

Internal Guide Dr. Siddappaji M R

Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide
Mr. Nithin K S
Project Manager,
Compsoft Technologies,



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the internship entitled "SENTIMENT ANALYSIS OF LOCKDOWN IN INDIA DURING COVID-19 A CASE" carried out by Mr. YASHWANTH YADAV PS, USN 1MV20EE077, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Dr. Siddappaji M R

Signature of HOD

Dr. Suresh H.L.

PRINCIPAL
SIR M. VISSIgnature of PrincipalNOLOGY
Krishcodev Prof. Rakesipsogranahali

International Apple Rates, Bangalore-562 157

DEPT, OF ELECTRICAL & ELECTRONICS ENGO.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadovarayanagar, Hunasamoranahalii
(Via) Yelaharika, Bengaluru - 562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Madlus Palati

2. Dr. Sidappatitur

MR 8 29/5/24

"Inana Sangama", Belagavi-590 018



# Internship Report on "SMART PARKING SYSTEM USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

YUVRAJ SINGH USN: 1MV20EE078

Under the Guidance of

Internal Guide Dr. Siddappaji M.R

Assistant Professor.

Electrical & Electronics Engineering.

Sir M.VIT, Bengaluru.

External Guide Ms. Spoorthi C

Director, Varcons Technologies Pvt. Ltd., Ulsoor, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001 2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



## CERTIFICATE

Certified that the internship entitled "SMART PARKING SYSTEM USING IOT" carried out by YUVRAJ SINGH, USN 1MV20EE078, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. Siddappaji M.R.

Dr. Suresh H L

Kis Signature of Principal

### EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Hadhu Palabi helw 29/5/24 2. Dr. Siddaffasther TR Benjer/5/174

"Jnana Sangama", Belagavi-590018



## **Internship Report**

On

## "STUDY ON SUBSATATION MAINTENANCE"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by AMRUTH KUMAR N USN: 1MV21EE402

Under the Guidance of

Internal Guide

Mr. Pradeep kumar

Assistant Professor,

Electrical & Electronics Engineering,

Sir. MVIT, Bengaluru.

External Guide
Mr. Lakshman S G
Executive Engineer
K.P.T.C.L.66/11kV
TL&SS Division, Doddaballpur.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "STUDY ON SUBSATATION MAINTENANCE" carried out by Mr. AMRUTH KUMAR N USN 1MV21EE402, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. Suresh H L

KrishnoSignature of Principal aball International Profit Rakeshospere-562 157

**EXTERNALVIVA** 

Name of Examiners

Signature with Date

or mather p

"Jnana Sangama," belagavi-590 018



### Internship Report

on

# "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

ASHOKA K M USN: 1MV21EE403

Under the Guidance of

Internal Guide

Mr. Pradeep Kumar

Assistant Professor, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide
Mr. Rakesh R

Maintenance department
Harsha Switchgears Pvt Ltd,
Andrahalli, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the internship entitled "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS" carried out by Mr. ASHOKA K M USN 1MV21EE403, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide

Signature of HOD Dr. Suresh H L

Signature of Principal Prof. Rakes 61861

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Airport Road, Bangalore-562 157

### **EXTERNAL VIVA**

Name of Examiners

Signature with Date

1. CVM. Luc

2.

br. moslup

holes 27/29

"Jnana Sangama," Belagavi-590 018



### Internship Report

on

# "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
B MADHU
USN: 1MV21EE404

Under the Guidance of

Internal Guide
Mr. Pradeep Kumar
Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. Anil Kumar
Assistant Engineer (Electrical),
YCCP, KPCL
Yelahanka, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED" carried out by Mr. B MADHU, USN 1MV21EE404, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the awardof the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Dr. Suresh H L

PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS EMGG. SIR M. VISYESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevarayanegar, Hunasemeranian.

(Via) Yelahanka, Bengaluru - 552 Yuli

EXTERNAL VIVA

Name of Examiners

Signature with Date

PRINCIPAL SIR AL YOUVESVARAYA INCOMPUTE OF TECHNOLOGY Krishnadovarayarıngar, Hunasamaranahalli hternsignature deprincipalire-562 157

Prof. Rakesh S G

"Jnana Sangama," Belagavi-590 018



### **Internship Report**

on

### "WAREHOUSE MONITORING SYSTEM USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
BALAJI JC
USN: 1MV21EE405

Under the Guidance of

Internal Guide Mr. Pradeep kumar

Assistant Professor, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide Mrs. kareemunisa

Technical head, Nano robotics embed technologies, Mathikere, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the internship entitled "WAREHOUSE MONITORING SYSTEM USING IOT" carried out by Mr. BALAJI JC USN 1MV21EE405, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Dr. Suresh H L

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOG

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Do Sidde Mather McBentralshy 2. Dr. Madher Palati May 18/24

"Jnana Sangama," Belagavi-590 018



## **Internship Report**

on

# "MANUFACTURING AND ASSEMBLY OF DIESEL GENERATOR SETS"

submitted in partial fulfilment of the requirements for the award of the degree of

### **BACHELOR OF ENGINEERING**

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**CHANDAN R** 

**USN:1MV21EE406** 

Under the Guidance of

Internal Guide Mr. V Rajesh kumar

Assistant Professor, -Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide Mr. Shivaprasad

General Manager and Admin
Powerica Limited,
Nelamangala, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "MANUFACTURING AND ASSEMBLY OF DIESEL GENERATOR SEIS" carried out by Mr. CHANDAN R USN 1MV21EE406, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr.V Rajesh kumar

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY Krishnedeverayanspar, Hunasamaranahsal (Ma) Yelahanka, Bengaluru - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. EV mohan 2. Dr. Mayjutt Bah y

Attestone

PRINCIPAL SIR M. VISVESVAREDA TO STITUTE OF TECHNOLOGY Krishnedevarayan azar, Hunasamaran ahaili nternasoda ayazar, Roso, Bargalore-562 157

Prof. Rakesh S G

"Jnana Sangama", Belagavi-590 018



# Internship Report on "STUDY OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

CHETAN
USN: 1MV21EE407

Under the Guidance of

#### Internal Guide

Mr. V Rajesh Kumar
Assistant Professor.
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

#### External Guide

Mrs. Kalyani N Madari Assistant Executive Engineer, KPTCL Kalaburagi,



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION" carried out by Mr. CHETAN, USN 1MV21EE407, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. V Rajesh Kumar Dr. Suresh H L

PRINCIPAL SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY Krishnadevaravanegar, Hunasamaranahalli Intern Signature of Principale-562 157

Prof. Rakesh S G

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. ev mil m 2. Dr. Majuult Bahr Att.

"Jnana Sangama", Belagavi-590 018



#### Internship Report On

# "SAFETY CONTROL OF CABLE"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

CHETHAN KUMAR S USN:1MV21EE408

Under the Guidance of

Internal Guide
Mr. V Rajesh Kumar
Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. Devenadrappa
Engineer,
ASK Automotive Ltd,
Narasapura



**Department of Electrical & Electronics Engineering** 

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "SAFETY CONTROL OF CABLE" carried out by Mr. CHETHAN KUMAR S USN 1MV21EE408, a bonafide students of SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated inthe report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. V Rajesh Kumar

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVES LARAYA INSTITUTE OF TECHNOLOGY Krishned wernyanoger, Hunasameranahalil (Vio) Yelahanka, Bergeluru - 562 157

EXTERNAL VIVA

Name of Examiners

Or moly

Signature with Date

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranaha Integrandere of Principal

Prof. Rakesh S G

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

# "STUDY ON ELECTRICAL ARCHITECTURE AND FUNCTIONS OF VOLVO-EICHER VEHICLE"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
INDUMATHI K HIREMATH
USN:1MV21EE409

Under the Guidance of

#### **Internal Guide**

#### Mr.V Rajesh Kumar

Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

#### **External Guide**

#### Mr. Jagan Raj G.V

Assistant Manager, VE Commercial Vehicles, Hoskote, Bengaluru.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY ON ELECTRICAL ARCHITECTURE AND

FUNCTIONS OF VOLVO-EICHER VEHICLE" carried out by Ms. INDUMATHI K

HIREMATH, USN 1MV21EE409, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. V Rajesh Kumar Dr. Suresh H.I

SIR M. VISVESVARA . STITUTE OF TECHNOLOGY Krishnadovara jurayan, Hunasamaranahalli

InterSignature of Perifferpabre-562 157

PRINCIPAL

Prof. Rakesh S.G.

DEPT OF ELECTRICAL & LLECTROSHOT THE C SI'R M. VISYESYARAYA INSTITUTE OF TECHNOLO TI Krietinsamaranger, Humanmarangtul (Wild) Vollahurste, Estonium - 562 157

#### **EXTERNAL VIVA**

Name of Examiners

Signature with Date

1.

Er molen

"Jnana Sangama," Belagavi-590 018



#### **Internship Report**

on

# "STUDY OF SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by JALINDAR USN:1MV21EE410

Under the Guidance of

#### Internal Guide

Mr. V Rajesh Kumar
Assistant Professor.

Electrical & Electronics Engineering.
Sir. MVIT, Bengaluru.

#### External Guide

Mr. Shiva Shankar Executive Engineer, KPTCL 220 KV Substation, Humnabad 585330.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled STUDY OF SUBSTATION MAINTENANCE carried out by Mr. JALINDAR USN:1MV21EE410, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide

Mr. V Rajesh Kumar

Signature of HOD

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnedevarayanagar, Hunasamaranahalli International Arport Rood, Bangalore-562 157

DEPT OF FLECTIONAL 2, PLETRONICS ENGG.

SIR M. VIOLENALOM INSTITUTE OF TECHNOLOGY

Krishnadevorayenogar, Hungesmerenehall

(Via) Yalohorka, Bengeluru - 562 157

Prof. Rakesh S G

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. CV mohan 2. pr. rejutt BL/

+ Hadfin

"Jnana Sangama," Belagavi-590 018



#### **Internship Report**

#### "SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

## **BACHELOR OF ENGINEERING** IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by KISHOR R HASILKAR USN:1MV21EE411

Under the Guidance of

#### Internal Guide

Mr. V Rajesh Kumar Assistant Professor. Electrical & Electronics Engineering. Sir. MVII. Bengaluru.

#### External Guide

Mr. Lakshmi Narayana P Assistant Executive Engineer, KPTCL Devanahalli. Bengaluru.



Department of Electrical & Electronics Engineering

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

rtified that the internship entitled "SUBSTATION MAINTENANCE" carried out by Mr.KISHOR HASIKARUSN: 1MV21EE411, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF CHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of schelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological niversity, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated Internal Assessment have been incorporated in the report deposited in the department library. The ternship report has been approved as it satisfies the academic requirements in respect of internship work escribed for the above-mentioned degree.

Signature of Guide Mr. V Rajesh Kumar Dr. Suresh H LAD

PRINCIPAL

SIR M. VISVESVARAYA EXISTITUTE OF TECHNOLOGY Krishnedevarayanaçat, Hunasamaranahalli

International Preparation 1562 157 Prof. Rakesh S G

DEFT OF ELECTRICAL & ELECTRONICS ENGG. SIR AL VICUESYARAYA INSTITUTE OF TECHNOLOGY Krishnadovarayanegar, Hunasameranahali (Via) Yelahurka, Danguluru - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

or. Majut Belog

"Jnana Sangama," belagavi-590 018



#### Internship Report

on

## "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS"

submitted in partial fulfilment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

#### LIKITH GOWDA H S USN: 1MV21EE412

Under the Guidance of

Internal Guide Mr. V. Rajesh Kumar

Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. Rakesh R

Maintenance department,
Harsha Switchgears Pvt Ltd,
Andrahalli, Bengaluru.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS" carried out by Mr. LIKITH GOWDA H S USN 1MV21EE412, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mr. V. Rajesh Kumar

Signature of HOD Dr. Suresh H L PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadəvarayanagar, Hunəsamaranahalli
International Atmort Principa 562 197

Prof. Rakesh S G

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. DY CUMOhan En 3018 2. pr. Ne junt But P Attackstry

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

# "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by M MOHAN KUMAR USN: 1MV21EE413

Under the Guidance of

#### Internal Guide

Ms.P.Kezia Joy Kumari
Assistant Professor,
Electrical & Electronics Engineering,
Sir. M.VIT, Bengaluru.

#### External Guide

Mr. Anil Kumar Assistant Engineer (Electrical), YCCP, KPCL, Yelahanka, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED" carried out by Mr. M MOHAN KUMAR, USN 1MV21EE413, a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Mrs.P.Kezia Joy Kumari

SHR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayonagar, Hunasamaranahalli International Almort 6375 Bangalore 562 157

Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR K. VISVESVARAYA INSTITUTE OF TECHNOLOG! Krishnadevarayanagar, Hunesamerenghalil (Via) Yelahanka, Gengaluru - 552 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Ev moh om 2. Dr. Menjulte Belly

"Joana Sangama", Belagant-590 013



#### Internahip Report

on

#### "COMBINED CYCLE GAS POWER PLANT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MANOJKUMAR L USN: 1MV21EE415

Under the Guidance of

Internal Guide
Mrs. P. Kezia Joy Kumari
Assistant Professor
Electrical & Electronics Engineering
Sir MVIT, Bengaluru

External Guide
Mr. Gururaj
Chief Engineer(O&M), YCCPP
Kpc Gas Power Corporation Limited
Yelahanka, Bengaluru



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

by Mr. MANOJKUMAR L USN-1MV21EE415, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the awardof the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. P. Kezia Joy Kumari Signature of HOD Dr. Suresh H L PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Hunasamaranahalli
Internadignaturerof Principal-562 157

Prof. Rakesh S G

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Cv moley

2. Dr. masher p

holy 27/0/24

"Jnana Sangama," Belagavi-590 018



# Internship Report on "INDUSTRIAL COMMUNICATION PROTOCOLS"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MOHAMMED MAAZ USN: 1MV21EE416

Under the Guidance of

Internal Guide Ms P Kezia Joy Kumari

Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide Mr Prashanth

Lead Manager, Harmonizer India Private Limited, Sunkadakatte, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "INDUSTRIAL COMMUNICATION PROTOCOL" carried out by Mr. MOHAMMED MAAZ USN 1MV21EE416, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Ms P Kezia Joy Kumari

Dr Suresh H L

PRINCIPAL SIR M. VISVESYAPAYA INSTITUTE OF TECHNOLOGY Krishnadevar iyanegar, Hunasamaranahalli Internal signature of Principlate-562 187 Prof Rakesh S G

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Par. W mohn 2. Dr. Manjural Rat P

"Jnana Sangama," belagavi-590 018



#### Internship Report

on

#### "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING

IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MOHAMMED NAWAZ USN: 1MV21EE417

Under the Guidance of

Internal Guide

Ms. P. Kezia Joy Kumari

Assistant Professor, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide Mr. Rakesh R

Maintenance department Harsha Switchgears Pvt Ltd, Andrahalli, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS" carried out by Mr. MOHAMMED NAWAZ USN 1MV21EE417, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the VisvesvarayaTechnological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. P. Kezia Joy Kumari Signature of HOD Dr. Suresh H L PRINCIPAL

SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY Krishnadavarayanagar, Hunasamaranahaili

Inter Signature of Principal re-562 157

Prof. Rakesh S G

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Nampul Bah

A 1/30/8/14

"Jnana Sangama,"Belagavi-590018



#### Internship Report

Of

#### "STUDY OF SUBSTATION MAINTENANCE"

submitted impartial fulfillment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

M V TEJASRI USN: 1MV21EE419

Under the Guidance of

Internal Guide

Mrs. P Kezia Joy Kumari
Assistant Professors,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide

Mr. Lakshminarayan Assistant Executive Engineer. Nodal Officer TL &SS, KPTCL, Chikkaballapur.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 18O 9001 2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION MAINTENANCE" carried out by Ms. M V TEJASRI USN 1MV21EE419, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signatured of Guide Mrs. P Kezia Joy Kumari DESTENDIFIED

DEPT. OF ELECTRICAL & ELECTRONICS ENGO.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadovarayanagar, Hunasamatanahahi SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOG (Via) Yelahanka, Bengaluru - 552 157

Signatur@gf Principal Prof. (Rakesh S.G.)

PRINCIPAL

Krishnodevarayanagar, Hunasamaranahalli International Airport Road, Bangalore-562 15:

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. CV mohon 2. Dr. Majurtt Roby

"Jnana Sangama,"Belagavi-590018



#### Internship Report

on

#### "STUDY OF SUBSTATION MAINTENANCE"

submitted impartial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

NAVYA D

**USN:1MV21EE420** 

Under the Guidance of

Internal Guide

Mrs. P Kezia Joy Kumari Assistant Professors, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide

Mr. Lakshminarayan Assistant Executive Engineer, Nodal Officer TL &SS, KPTCL, Chikkaballapur.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION MAINTENANCE" carried out by Ms. NAVYA D USN 1MV21EE420, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signatures of Guide Mrs. P Kezia Joy Kumari

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISYESVARAYA INSTITUTE OF TECHNOLOGY Krishnedevarayenogar, Hunasamaranahalii (Via) Yelahanka, Berigaluru - 562 157

EXTERNAL VIVA

Signature of Principal

Prof. Bakesh S G

PRINCIPAL

SIR M. VISVÈSVARAYA INSTITUTE OF TECHNOLOG Krishnadevarayariag: Hunasamaranar alli International Airport Road, Bangalore-562 15

Name of Examiners

Signature with Date

1. Dr. Nayund Bed p

"Jnana Sangama," Belagavi-590 018



# Internship Report on "INDUSTRIAL COMMUNICATION PROTOCOLS"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

NIKHIL.M. PATIL USN: 1MV21EE422

Under the Guidance of

Internal Guide

Ms. Priyanka Nayak

Assistant Professor,

Electrical & Electronics Engineering,

Sir. MVIT, Bengaluru.

External Guide
Mr. Prashanth
Lead Manager,
Harmonizer India Private Limited,
Nagarbhavi, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "INDUSTRIAL COMMUNICATION PROTOCOLS" carried out by Mr. NIKHIL.M. PATIL USN 1MV21EE422, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. Priyanka Nayak PROFF. AuggetylijL

DEPT OF ELECTRICAL & ELECTRONICS ENGS. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayeneger, Hunesameranahalli (Via) Yelshanka, Bongaiuru - 562 157

PRINCIPAL

SIR M. VISVĖSVARAYA INSTITUTE OF TECH\*10LOG

Krish Signature of Principal Internation Prof. Rockett

Prof. Rakesh S G

EXTERNAL VIVA

Name of Examiners

1. Dr. C.V. Mohan

2. Dr. Madhu.P

Jely 27/2

"Jnana Sangama,"Belagavi-590018



#### Internship Report

on

#### "STUDY OF SUBSTATION MAINTENANCE"

submitted impartial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

#### POOJA K R USN:1MV21EE423

Under the Guidance of

#### Internal Guide

Ms. Priyanka Nayak Assistant Professors. Electrical & Electronic Engineering. Sir. M.VIT, Bengaluru.

#### External Guide

Mr. Gangadhar G Assistant Executive Engineer, Nodal Officer 110KV KPTC, Mudhol, Bagalione.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157
2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF SUBSTATION MAINTENANCE" carried out by Ms. POOJA K R USN 1MV21EE423, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship reporthas been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signatures of Guide Mrs. Priyanka nayak

Krishnodeval Fro ha Rakes 17 S angalore-562 157 International Amport Road, Bangalore-562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Pr. Cumo my 2. pr. Majnall Bal V

"Jnana Sangama", Belagavi-590018



#### Internship Report

on

## "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

PRAJWAL G USN: 1MV21EE424

Under the Guidance of



Internal Guide

Mrs. Priyanka Navak

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide Mr. Rakesh R

Maintenance department, Harsha Switchgears Pvt Ltd, Andrahalli, Bengaluru.



Department of Electrical & Electronics Engineering

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Internship entitled "STUDY OF ELECTRICAL SWITCHGEAR EQUIPMENTS" carried out by Mr. PRAJWAL G USN 1MV21EE424, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report depositedin the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Priyanka Nayak Dr. Suresh H L

PRINCIPAL SIR M. VISVĖSVARAVA INSTITUTE OF TECHNOLOGY Krishnadayarayenegar, Hunasamaranahaili Internatio Signature of Principal 2 157

Prof. Rakesh S G

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Cv miky 2. Dr. Manjumb Back y

"Jnana Sangama," Belagavi-590 018



on

# "IMPLEMENTATION OF AI BASED VISION SYSTEM TO IMPROVE PRODUCTQUALITY"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by PRATEEK D

USN: 1MV21EE426

Under the Guidance of

Internal Guide

Mrs. Priyanka Nayak
Assistant Professor.
Electrical & Electronics Engineering.
Sir. MVIT, Bengaluru.

External Guide

SREEDHAR K
Group Leader-Manufacturing,
BOSCH AUTOMOTIVE
ELECTRONICS INDIA
Pvt.Ltd., Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "IMPLEMENTATION OF AI BASED VISION SYSTEM TO IMPROVE PRODUCT QUALITY" carried out by Mr. PRATEEK D, USN 1MV21EE426, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Signature of Guide Mrs.Privanka Nayak

Signature of HOI Dr. Suresh H L PROF. & HEAD

DECY OF ELECTRICAL & ELECTRONICS ENGO. # YISVESVARAYA INSTITUTE OF TECHNOLOGY ...cansdevarayenager, Huneverneranehall

(Via) reinhanka, Bengaluru - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

Cvm.ha Ex 231, br. masher / John 20/1/24

Krishnadevaration Inclination Of TECHNO Bignature of Principal samaranah

Prof. Rakesh S.G Bangalore 562

"Jnana Sangma", Belagavi-590 018



Internship Report

on

#### "STUDY ON CNC MACHINES"

submitted in partial fulfillment of the requirements for the award of the Degree of

### BACHELOR OF ENGINEERING

IN

# **TRICAL & ELECTRONICS ENGINEERING**

Submitted by PUNEETH C G USN-1MV21EE427

Under the Guidance of

Internal Guide
Ms. Priyanka Nayak
Assistant Professor.,
Electrical & Electronics Engineering.,
Sir M.VIT., Bengaluru

External Guide
Mr. Manju Bhargav L
Assistant Manager.,
Electrical Assembly,
Bharat Fritz Werner Ltd., Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "STUDY ON CNC MACHINE" carried out by Mr. PUNEETH C G, USN-1MV21EE427, a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide

Ms. Priyanka Nayak

Signature of HOD 24

Signature of HOD

Kris Signature of Brinary of Britary of Prof. Rakesh S G

PRINCIPAL

DENT OF ELECTRICAL & ELECTRONICS ENDS.

STRIM, VISVESVARAYA IMSTITUTE OF TECHNOLOGY K. Shinadovnirayarvayar, Humasamarenahalli (Via) Yolshanka, Bangalum, - 502, 157

EXTERNAL VIVA

Name Of Examiner

Signature with Date

1. Dr. Madhu Palati

2. Dr. Siddppadr. MC

John 29/5/29
TOR Sensor

"Jnana Sangama", Belagavi-590 018



### Internship Report

on

#### "SUPPLY MANAGEMENT AND BASICS OF SUBSTATION"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by
PUNITH KUMAR T L
USN:1MV21EE428

Under the Guidance of

#### Internal Guide

Mrs. Priyanka Nayak
Assistant Professor
Electrical & Electronics Engineering
Sir MVII, Bengaluru.

#### External Guide

Mrs. Suchita Lugun
Assistant I xecutive Engineer
Nodal officer KPTCL
Doddaballapura.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001.2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Internship work entitled "SUPPLY MANAGEMENT AND BASICS OF SUBSTATION " carried out by Mr. PUNITH KUMART L, USN: 1MV21EE428 bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship work report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Priyanka Nayak SIR M. VISYESYARAYX INSYMBHEIDELTECHNOLOGY Krishnaduvarsynnegar, Hunasameranatistii (Via) Yelatunka, Rengeluru - 582 157

PRINCIPAL SIR M. VISVESVARA CONTITE OF TECH Krishnedignature of Principal ITE OF TECHA International Profit Rakesh SG

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Cymity 2. - on rejuk Ret 1

Alagon 2815

"Jnana Sangama," Belagavi-590 018



#### **Internship Report**

on

## "STUDY ON SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

RITHESHKUMAR USN:1MV21EE430

Under the Guidance of

#### Internal Guide

Ms.Priyanka Nayak
Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

#### External Guide

Mr. LAKSHMAN S G
Executive Engineer.
KPTCL Devanahalli,
TL&SS Division Dodballapura.



**Department of Electrical & Electronics Engineering** 

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "STUDY ON SUBSTATION MAINTENANCE" carried out by Mr. RITHESH KUMAR USN 1MV21EE430, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. Priyanka Nayak Dr. Suresh H L

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli

Internating alarmet of Principal 562 157

Prof. Rakesh S G

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Crmoha 2. Dr Manjunk Ruh f

"Jnana Sangama", Belagavi-590 018



## Internship Report

On

## "STUDY ON SUBSATATION MAINTENANCE"

submitted in partial fulfillment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

#### ROOPESH N

USN:1MV21EE431

Under the Guidance of

Internal Guide Mrs. Priyanka Nayak Assistant Professor,

Electrical & Electronics Engineering, Sir. MVIT, Bengaluru.

External Guide Mr. Lakshman S G Executive Engineer. K.P.T.C.L. 66/11 kV TL&SS Division, Doddaballpur.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY ON SUBSATATION MAINTENANCE" carried out by Mr. ROOPESH N USN 1MV21EE431, a bonafide students of SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Priyanka Nayak Dr. Suresh H L

SIR M. VISVESVARAVA COTITUTE OF TECHNOLOG Krishriguature of Principar ranahalli

Internation Rockip Rakesh S Galore-562 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. (v mom 2317 2. Dr. Manjurathe Best p AT/20/5/24

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

### "STUDY ON SUBSTATION EQUIPMENTS"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by SACHIN S KARAGI USN:1MV21EE432

Under the Guidance of

Internal Guide
Mrs. VIJAYALAKSHMI A. K

Assistant Professor, Electrical & Electronics Engineering, Sir. M.VIT, Bengaluru. External Guide Mr. VIJAYA JOSHI Assistant Executive Engineer, KPTCL Ranebennur.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTV, Beingavi, 18O 9004 2008 Certified).

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY ON SUBSTATION EQUIPMENTS" carried out by Mr. SACHIN'S KARAGI, USN 1MV21EE432, a bonafide student of Sir M. VISVESVARAVA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Vijavalakshmi A. K Signature of HOD

Signature of Principal Prof. Rakesh S G

DEFT OF ELECTRICAL & BLECTRONICS ENGA SIR M. VISVESVARATA LISTITUTE OF TELHNOLOGY Krishnadevarayonapar, Humasamaranahalli (Ma) Yalaharus, Bargastar - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. CV mily

2.

Dr. Matherp

Jal 2015/211

"Jnana Sangama", Belagavi-590 018



"SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SAQEEB PASHA USN: 1MV21EE434

Under the Guidance of

Internal Guide

Mrs. Vijavalakshmi A K

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide

Mrs. Shashikala H

Executive Engineer (ELE), 400/220kV Substation, Devanahalli Hardware park, Bengaluru,



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the internship entitled "SUBSTATION MAINTENANCE" carried out by Mr. SAQEEB PASHA USN- 1MV21EE434, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Signature of Guide Mrs. Vijayalakshmi A K Signature of HOD

FDR. Stiresh HHAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Humasan.oranahalli
(Via) Yelaharda, Bangaluru - 562 157

Signature OF TRINGIPAL Signature OF TECHNOLOG Krishnedovář vanegar, Hunesamaranahalli International Airport Roed, Bangalore-562 151

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Hayunt Baly

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

## "ORIENTATION ON NEUMERICAL RELAY FOR SUBSTATION AUTOMATION WHICH INCLUDES TESTING & DEBUGGING OF NEUMERICAL RELAY"

submitted in partial fulfillment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by SARASWATI S S

USN: 1MV21EE435

Under the Guidance of

#### Internal Guide

Mrs. Vijayalakshmi. A.K

Assistant Professor.

Electrical & Electronics Engineering.
Sir. MVII. Bengaluru.

**External Guide** 

Mr. Nandan Shetty

Production manager ZIV.India Private Limited, Bengaluru.



# Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

**Department of Electrical & Electronics Engineering** 



#### **CERTIFICATE**

Certified that the internship entitled "ORIENTATION ON NUMERICAL RELAY FOR SUBSTATION AUTOMATION WHICH INCLUDES TESTING AND DEBUGGING OF NUMERICAL RELAY" carried out by Ms. SARASWATI SHEKKHARAPPA SHIRUR, USN 1MV21EE435, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Vijayalakshmi A K Signature of HOD Dr. Suresh H L SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnodevarayanagar, Hunasaynaranahalli

Prof. Rakesh S.G.

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. ( v mily

2. Dv. cv mola

12-11-15

John 27/5/24

"Jnana Sangama", Belagavi-590 018



# Internship Report

On

# "SUBSTATION MAINTENANCE"

submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING

IN

# ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

**SELVANS** 

USN:1MV21EE436

Under the Guidance of

Internal Guide
Ms. Vijayalakshmi A K

Assistant Professor, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide Smt. Smitha U

Assistant Executive Engineer, K.P.T.C.L. 220 kV NRS Division Rajajinagar, Bangaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled ' "SUBSTATION MAINTENANCE" carried out by Mr. SELVAN S USN 1MV21EE436, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. Vijayalakshmi A K Dr. Suresh HLAD

PRINCIPAL SIR M. VISVĖSVARAYA (INSTITUTE OF TECHNOLOGY A Krishnadevarayanagar, Hupasamaranahalli International ARDR RUGO, Sandalli 1802 157 Prof. Rakesh S G

DEPT. OF ELECTRICAL & ELECTROPHICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadovarayanagar, Hunasamaranahalli (Via) Yolahanka, Bengaluru - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

Dr. Nejunk Baly

"Jnana Sangama", Belagavi-590 018



### Internship Report On

# "STUDY OF OPERATION AND MAINTENANCE OF SUBSTATION"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

SHARATH KUMAR U USN:1MV21EE437

Under the Guidance of

Internal Guide
Mrs. Vijayalakshmi A K
Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr. Girirsh Bestara
Assistant Executive Engineer.
220/66/11 kV Substation,
Sira, Madhugiri



**Department of Electrical & Electronics Engineering** 

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "STUDY OF OPERATION AND MAINTENANCE OF SUBSTATION" carried out by Mr. Sharath Kumar U, USN 1MV21EE437, a bonafide student of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academicrequirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Vijayalakshmi A K Signature of HOI

Dr. Suresh H L

PROF. & HEAD DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY Krishnadavarayanagar, Hunasamar Lirahalli (Via) Yelahanka, Bengakuru - 562 157

EXTERNAL VIVA

Name of Examiners

1. Dr. CVMille 2. Dr. Majuralle Bede p

Signature with Date

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Airport Road Bangalors 662 157

Prof. Rakesh S G

2

"Jnana Sangama", Belagavi-590 018



# Internship Report On "OVER-ALL SYSTEM STUDIES OF SLDC"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by SHASHIDHAR S USN:1MV21EE438

Under the Guidance of

#### Internal Guide

Mrs. Vijayalakshmi A K
Assistant Professor
Electrical & Electronics Engineering
Sir. MVIT, Bengaluru.

**External Guide** 

Mrs. Supreetha H Naik Executive Engineer, SLDC, KPTCL Bengaluru.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship report entitled "OVER-ALL SYSTEM STUDIES OF SLDC" carried out by Mr. SHASHIDHAR S 1MV21EE438, Bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship report has been approved as it satisfies the academic requirements in respect of internship report prescribed for the above-mentioned degree.

Signature Guide

Mrs. Vijayalakshmi A K

Krishnedevarayanagan, Hunasamaranahalli International Aircott in Bassajore-562 157

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Prof. Rakesh S G

DP. SCIPESHALLEAD
DEFT, OF ELECTRICAL & ELECTRONICS ENGO. SIP M. VICYESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevareyenagar, Hurusamarenahalli

(Via) Yolahore'ra, Bangaluru - 552 157

**EXTERNAL VIVA** 

Name of Examiners

1. CV Mohy 2. Dr. Majurth Bohy

Signature wit

"Jnana Sangama," Belagavi-590 018



# Internship Report On "EMBEDDED SYSTEM AND IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by SHEETHAL C USN: 1MV21EE439

Under the Guidance of

Internal Guide

Ms. Vijayalakshmi A K

Assistant Professor,

Electrical & Electronics Engineering

Sir. MVIT, Bengaluru.

External Guide

Mr. Abdulnabi Kembavi

Director,

Mifratech OPC Private Ltd,

Yelahanka New Town, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



## CERTIFICATE

Certified that the internship entitled "EMBEDDED SYSTEM AND IOT" carried out by Ms. SHEETHAL C USN: 1MV21EE439, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. Vijayalakshmi A K

Dr. Suresh HAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayenagar, Hundsamater Dialili (v.u., Yelshania, Bengslury - 562 157

EXTERNAL VIVA

Name of Examiners

1. Da. C.V. Mohan

2. Dr. Madhu.p

Signature with Date

SIR M. VISVESVARIVA ".. CHUTE OF TECHNOLOGY Krishnedevarnyanaga, Hunasamararahala Intern Signature of Principal 9-562 157

Prof. Rakesh S G

helw 27.5

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

# "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by SHIVA KUMAR USN: 1MV21EE440

Under the Guidance of

Internal Guide

Ms. Vijayalakshmi A.K.

Assistant Professor, Electrical & Electronics Engineering, Sir. M.VIT, Bengaluru. External Guide

Mr. Gururaj

Assistant Engineer (Electrical), YCCP, KPCL, Yelahanka, Bengaluru.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED" carried out by Mr. SHIVA KUMAR, USN 1MV21EE440, a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Signature of Guide Ms. Vijayalakshmi A.K Dr. Suresh H.L

SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY Krishn Signature of Principal 562 157 Internation Prof. Rakesh S G

DEPT, OF ELEKTRICAL & ELECTRONICS ENGO. SIR M. VISVESVARAYA INSTITUTE OF TECHNOL: 07 Krishnadevarayahagar, Hunseamorer enest (Via) Yolutsavia, Songsium - 502 151

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Siddar Patrive 2. Dr. Madhu Palati

1028 29/5/24

"Jnana Sangama", Belagavi-590 018



# Internship Report on "INDUSTRIAL COMMUNICATION PROTOCOLS"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SHIVALINGAYYA USN: 1MV21EE441

Under the Guidance of

Internal Guide Ms. Vijayalakshmi A. K

Assistant Professor,
Electrical & Electronics Engineering,
Sir M.VIT, Bengaluru.

External Guide Mr. Prashanth

Lead Manager, Harmonizer India Private Limited, Sunkadakatte, Bengaluru.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "INDUSTRIAL COMMUNICATION PROTOCOL" carried out by Mr. SHIVALINGAYYA, USN - 1MV21EE441, a bonafide student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Ms. Vijayalakshmi A. K. Dr. Suresh H L

SM AL VISVESVARAYA INSTITUTE OF TECHNASI Krist verb i crayanugar, Hunasamarariahalli harmisignature of Pidneipal 562 157 Prof. Rakesh S G

#### **EXTERNAL VIVA**

Name of Examiners

Signature with Date

1. Cv moly 2. Dr. Manjunt Bluer

"Jnana Sangama", Belagavi-590 018



or

# "ELECTRICAL MAINTENANCE IN EARTH MOVER DIVISION AND HYDRAULIC AND POWER LINE DIVISION AT BEML"

submitted in partial fulfillment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

# ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by SRINATH K V USN: 1MV21EE442

Under the Guidance of

Internal Guide

Mrs. Harshithananda B

Assistant Professor, Electrical & Electronics, Engineering, Sir M.VIT, Bengaluru. External Guide

Mr. RAJESH R

Manger in Electrical, BEML Ltd, KGF complex, BEML Nagar.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "ELECTRICAL MAINTENANCE IN EARTH MOVER DIVISION AND HYDRAULIC AND POWER LINE DIVISION AT BEML" carried out by Mr. SRINATH K V, USN 1MV21EE442, a bornfide student of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Blutt Signature of Guide Mrs. Harshithananda B

PACHURCH EAD

DEPT, OF ELECTRICAL & ELECTRONICS ENGG.

SIR AL VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Via) Yelshantia, Bangaluru - 562 157

Knishinad avarayanagar, Hunasamaranahali R. M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevarayanagar, Hunasamaranahal

Signature of Principal

International Airport Road, Bangalore-562 1

EXTERNAL VIVA

Name of Examiners

Signature with Date

Dr. Majuetto Best y

"Jnana Sangama", Belagavi-590 018



.....

on

#### "SUBSTATION MAINTENANCE"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SUDEEP PATIL USN: 1MV21EE444

Under the Guidance of

Internal Guide

Mrs. Harshithananda B

Assistant Professor, Electrical & Electronics Engineering, Sir M.VII, Bengaluru. External Guide

Mrs. Shashikala H

Executive Engineer (ELE), 400/220kV Substation, Devanahalli Hardware park, Bengaluru.



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "SUBSTATION MAINTENANCE" carried out by Mr. SUDEEP PATIL USN- 1MV21EE444, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the abovementioned degree.

Blum Signature of Guide Mrs. Harshithananda B

2981R M. VISVESVARA KrishnSignature of Principal DEPT. OF ELPRESHEHTERONICS EN Dernation Prof. Rakesh S. G.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarsyanagar, Hunecamaranahali (Via) Yelaharka, Bongaluru - 552 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. CV n. hay 50 k 2. Dr. Marjunto Bal 1 1/20/8/2

# VINVENVALIAVA TECHNOLOGICAL UNIVERSITY

<sup>13</sup>] Baha Bahgadin<sup>16</sup>, Helagast 699 918



# Internship Report on "OVERVIEW OF MISSILE SYSTEM"

submitted in partial fulfillment of the requirements for the award of the degree of

# HACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

# SUHAS R KARNAM UNN : IMV21EE445

Under the Guidance of

Internal Calde

External Guide

Mrs, Harshithamanda, B. Assistant Professor

Livetrical & The troons Engineering Sir MATI Rengalum



Mr. Roban D Dsouza

IIP Missile Systems.

Himsel Lactronics Limited.

HILL Couls Bengalura

Department of Electrical & Electronics Engineering SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTF New Delhi, Affiliated to VIU, Belagavi, 180 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157
2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001 2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the internship entitled "OVERVIEW OF MISSILE SYSTEM" carried out by Mr. SUHAS R KARNAM, USN 1MV21EE445, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated have been incorporated in the report deposited in the department library. The internship work report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide Mrs. Harshithananda, B

Signature of HOD

Dr. Suresh H L

Signature of Principal 552 157

Prof. Rakesh S G

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. CV Mohay

2. Dr mather p

John 27/6/24

"Inana Sangama," Belagavi-590 018



#### Internship Report

on

### "OVERVIEW ON MILITARY RADAR IN ALL DEPARTMENTS"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

IN

#### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

## SUMITH H V USN: 1MV21EE447

Under the Guidance of

Internal Guide
Mrs. Harshithananda, B

Assistant Professor, Electrical & Electronics Engineering, Sir. MVIT, Bengaluru. External Guide

Mr. Meenakshi sundram

HR, Military radar, Bharat Electronics Limited, Jalahalli, Bengaluru.



Department of Electrical & Electronics Engineering

# IR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

ff International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "OVERVIEW ON MILITARY RADAR IN ALL DEPARTMENTS" carried out by Mr. SUMITH H V USN 1MV21EE447, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Bhutt Signature of Guide Mrs. Harshithananda B

Dr. Suresh H L

PROF. & HEAD

DEPT, OF ELECTRICAL & ELECTRONICS EMGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishriadevarayanager, Hunssamai anahalii

(Via) Yelaharıka, Bengaturu - 562 157 **EXTERNAL VIVA** 

Name of Examiners

Signature with Date

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Prof. Rakesh S G

1. CV mit a 2. Dr. Hayuk Rat V

"Jnana Sangama," Belagavi-590 018



#### Internship Report

on

# "MANUFACTURING AND ASSEMBLY OF DIESEL GENERATOR SETS"

submitted in partial fulfilment of the requirements for the award of the degree of

#### BACHELOR OF ENGINEERING

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

UDAY J USN:1MV21EE448

Under the Guidance of

Internal Guide Mrs. Harshithananda B

Assistant Professor,
Electrical & Electronics Engineering,
Sir. MVIT, Bengaluru.

External Guide
Mr.Shivaprasad
General Manager and Admin
Powerica Limited,
Nelamangala, Bengaluru.



Department of Electrical & Electronics Engineering

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "MANUFACTURING AND ASSEMBLY OF DIESEL GENERATOR SETS" carried out by Mr. UDAY J USN 1MV21EE448, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the awardof the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Signature of Guide
Mrs. Harshithananda B

Signature of HOD

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Hunasamaranahalli
Internationsignia tülkerof Peripetipal ... 157

Dr. Suresh H L PROF. & HEAD Prof. Rakesh S G

PRINCIPAL

DEPT, OF ELECTRICAL & ELECTRONICS ENGG.

SIR AL VISVETY ARAYA INSTITUTE OF TECHNOLOGY

Krishnuduversynnogar, Hunesarne anshelll (Vio) Yulananka, Bengsluru - 582 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

2. or rujut poly

Alloss by

"Jnana Sangama," Belagavi-590 018



## Internship Report

on

# "OVERVIEW ON ADVANCE DEFENCE SYSTEM NAVY"

Submitted in partial fulfillment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by VENKATESH K

USN: 1MV21EE449

Under the Guidance of

Internal Guide

Mrs. Harshithananda,B

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide

Mr. Rohan Prakash Dsouza

HR, Advance defence system navy, Bharat Electronics Limited, Jalahalli, Bengaluru.



Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the internship entitled "AN OVERVIEW OF ORGANIZATION STUDY IN ADVANCE DEFENCE SYSTEM NAVY" carried out by Mr. VENKATESH K USN 1MV21EE449, a bonafide student of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Blum

Signature of Guide Mrs. Harshithananda B DIPSTORTH HEAD

PRINCIPAL SKR M. VISVĚSVARAYA INSTITUTE OF TECHNOLOGY Krishnodevaroverva / Hunesemaranahalli Signature of Principalore-562 157 Prof. Rakesh S G

DEPT, OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESYARAYA INSTITUTE OF TECHNOLOGY Krishnadavarayeng jer, Hunesamananahalil (Vis) Yelshanka, Bangaturu - 502 157

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Madhu Palati

2. Dr. Siden ror. Hr

hohr 39/5/24 Nr. Ber 39/6 hr

"Jnana Sangama", Belagavi-590 018



### **Internship Report**

on

# "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by MAHAMMAD MAKBUL USN: 1MV21EE450

Under the Guidance of

Internal Guide Ms. Harshithananda B

Assistant Professor, Electrical & Electronics Engineering, Sir M.VIT, Bengaluru. External Guide
Mr. Anil Kumar

Assistant Engineer (Electrical), YCCP, KPCL, Yelahanka, Bengaluru.



**Department of Electrical & Electronics Engineering** 

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

**Department of Electrical & Electronics Engineering** 



#### CERTIFICATE

Certified that the internship entitled "INPLANT TRAINING AT KARNATAKA POWER CORPORATION LIMITED" carried out by Mr. MAHAMMAD MAKBUL, USN 1MV21EE450, a Bonafede student of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfilment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the above-mentioned degree.

Ms. Harshithananda B

Dr. Suresh H L

Vishnade Signature of Principal international Air Profe Rakes bas 62562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Ev mohan 2. pr. Merjult Bat 1

"Jnana Sangama", Belagavi-590 018



### Mini Project Report

On

# "APPLICATIONS OF AUGMENTED REALITY IN ELECTRICAL ENGINEERING"

Submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

# ELECTRICAL & ELECTRONICS ENGINEERING Submitted by

AASTHA 1MV21EE001

JAYSHREE.V.S 1MV21EE018

MAHESH.M.A 1MV22EE417

MANJUNATH.M.S 1MV22EE419

#### Under the Guidance of

Dr.R.Sivapriyan.
Associate Professor.
Dept. of Electrical & Electronics Engineering



# Department of Electrical & Electronics Engineering Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the mini project work entitled "Applications of Augmented Reality in

Electrical Engineering "carried out by AASTHA [1MV21EE001], JAYSHREE V S [1MV21EE018], MAHESH M A [ 1MV22EE417], MANJUNATHA M S [1MV22EE419] a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for theabove-mentioned degree. PRINCIPAL

Signature of Guide 3169,

Dr.R.Sivapriyan.

Krishnadevarayanagar, Hunasamaranahalli Internatio Signiature of HOD Internatio Signiature of Principal 62 157 Dr.Suresh.H.L.

SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY

Prof. Rakesh.S.G.

INTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Siddapaji. HR 2. Dr. R. Nvapriyan

Holeman R. See VEZOS,

"Jnana Sangama", Belagavi-590 018



### Mini-Project Report

on

#### "ROBOTIC CONTROLLED ARM"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

#### IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

ADARSH M BALLARY - 1MV22EE400

DIVYATL - 1MV22EE408

HANAMANT PUJARI - 1MV22EE410

HARSHA KUMAR - 1MV22EE413

#### Under the Guidance of

#### Mrs. Rekha Radhakrishnan

Assistant Professor,
Dept. of Electrical & Electronics Eng.,
Sir M. VIT, Bengaluru.



### **Department of Electrical & Electronics Engineering**

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, **Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



# CERTIFICATE

Certified that the mini project work entitled "ROBOTIC CONTROLLED ARM" carried out by ADARSH M BALLARY (1MV22EE400), DIVYA T. L.(1MV22EE408), HANAMANT PUJARI (1MV22EE410), HARSHA KUMAR (1MV22EE413) bonafide students of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of mini-project work prescribed for the above-mentioned degree.

Signature Guide

Mrs. Rekha Radhakrishnan

PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishqadevarryanaga: Hunasamarananan Ngnature of Principal-562 157 Prof. Rakesh S. G.

**INTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Rethas

"Jnana Sangama", Belagavi-590 018.



Mini Project Report

on

"Touch Screen Based Home Automation System"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**RAVI TEJA G** 

1MV21EE043

**ROHIT** 

1MV21EE044

SHIVARAJ N

1MV21EE051

VEERAJ

1MV22EE451

Under the Guidance of

Dr. C.V. Mohan
Associate Professor
Electrical & Electronics Engineering
Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157, 2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the mini project work entitled "Touch Screen Based Home Automation System" carried out by RAVITEJA G, USN 1MV21EE043, ROHIT, USN 1MV21EE044, SHIVARAJ N, USN 1MV21EE051, VEERAJ, USN 1MV22EE451 a bonafide students of Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY, BENGALURU in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above mentioned degree.

Signature Guide

Dr. C. V. Mohan

Signature of HOD

Dr. Suresh H.

Signature of Principal T Prof. Rakesh S.G. samarar ahalli

istrational Altora Road, Bangalore-562 157

**EXTERNAL VIVA** 

Name of Examiners

1. Dr. Ashroini. AV 2. Dr. Rekha S

Signature with Date

"Jnana Sangama", Belagavi-590 018



Mini - Project Report

on

# "AUTOMATIC TEMPERATURE REGULATION OF ELECTRIC MOTOR USING PIC MICROCONTROLLER"

Submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

DARSHAN GOWDA. P.	1MV21EE011
KUSHAL G DIVAKAR	1MV21EE029
ANIL T. D.	1MV22EE401
MOHAMMED RAFIQ SHAIKH	1MV22EE423

Under the Guidance of

Mr .V. Rajesh Kumar Assistant Professor,



# Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, **Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



# CERTIFICATE

Certified that the mini project work entitled "Automatic Temperature Regulation Of Electric Motor Using Pic Microcontroller" carried out by DARSHAN GOWDA P.

(1MV21EE011), KUSHAL G DIVAKAR (1MV21EE029), ANIL T. D. (1MV22EE401), MOHAMMED RAFIQ SHAIKH (1MV22EE423) a bonafide students of SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature of Guide Mr .V. Rajesh Kumar

SIR M. VISVESVARAYA INSTITUTE OF TECHNOL (IGY International Airport Road, Bangalore-562 157 Krishnedsvarayanagar, Hunasamaranar alli (Via) Yelahanka, Bengaluru - 562 157

Signature of Principals TECHNOLOG SIR M. MISWESHARAYA INSTITUTE TECHNOLOG Krishaadevarayanagar, Hunasamaranahalli Krishaadevarayanagar, Hunasamaranahalli

**INTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Ashwini. A'V 2. Dr. Letha S

"Jnana Sangama", Belagavi-590 018



#### Mini Project Report

on

"Cow Health Monitoring System Using IoT"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

KRUTHIK KRISHNAMURTHY -1MV21EE028

LAKSHMIKANTH N. G. -1MV21EE031

SHREE HARIPRASAD NAYAK -1MV21EE052

SHREYAS. T. GOWDA -1MV21EE053

#### Under the Guidance of

Mr. Kumarswamy R
Assistant Professor
Dept of Electrical & Electronics Engg.
SIR M.VIT, Bengaluru.



**Department of Electrical & Electronics Engineering** 

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

 $(Approved \ by \ AICTE \ New \ Delhi, \ Affiliated \ to \ VTU, \ Belagavi, \ ISO \ 9001:2008 \ Certified)$   $Off \ International \ Airport \ Road, \ Krishnadevaraya \ Nagar, \ Bengaluru-562157$ 

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the mini project work entitled "Cow Health Monitoring System Using IoT" carried out by Mr. KRUTHIK KRISHNAMURTHY (1MV21EE028), Mr. LAKSHMIKANTH N. G (1MV21EE031), Mr. SHREE HARIPRASAD NAYAK (1MV21EE052) and Mr. SHREYAS T. GOWDA (1MV21EE053) bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, BENGALURU in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature of Guide

Mr. Kumarswamy R

Signature of

Dr. Suresh H. L.

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGI Krishnadevarayanagar, Hunasamaranahad International Alegor Principal lore-582 15

Prof. Rakesh S. G.

EXTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Rekha S 2. Dr. Ashurini AV

# 5

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



### Mini Project Report

on

#### "SMART ELECTRIC BICYCLE"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

CHANDAN.S.	1MV21EE009
CHANDRASHEKAR.K.N.	1MV21EE010
K.B MITHUN CARIAPPA.	1MV21EE019
M.NISHANTH YADAV.	1MV21EE032

# Under the Guidance of

Mr. Pradeep Kumar,
Assistant. Professor,
Dept. of Electrical & Electronics Engg.,
Sir M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar

Bengaluru – 562157

2023-2024

( Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited to NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the Mini Project work entitled "SMART ELECTRIC BICYCLE" carried out by, CHANDAN.S.[1MV21EE009],CHANDRASHEKAR.K.N.[1MV21EE010],K.B.MITHUN CARIAPPA.[1MV21EE019], M.NISHANTH YADAV.[1MV21EE032] a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the above-mentioned degree.

ature of Guide Mr. Pradeep Kumar.

Signature of H Drosuresh H. L.

Intergriginal Arrest Propalpre-562 157 DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnedeversysnegar, Hunesameranehalii (VIa) Yelehenka, Bengeluru - 562 157

Name of Examiner

1. Dr. Lethas

2. Dr. 18 hurini . 1 V

INTERNAL VIVA

Signature with Date

PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli

Prof. Rakesh S.G.

"Jnana Sangama", Belagavi-590 018



# Mini-Project Report

### "CONTACTLESS DIGITAL TACHOMETER"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### BACHELOR OF ENGINEERING

IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**INDUMATHI.T.C** 

-1MV21EE016

K.UDAY KETHAN

-1MV21EE020

BHARAT KUMAR.B.K - 1MV22EE402

MALLIKARJUNA

- 1MV22EE418

Under the Guidance of

Dr. Suresh. H.L. Professor & Head Dept. of Electrical & Electronics Engineering



# **Department of Electrical & Electronics Engineering**

# Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar **Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

Certified that the mini project work entitled "Contactless Digital Tachometer" carried out by INDUMATHI.T.C [1MV21EE016], K.UDAY KETHAN [1MV21EE020], BHARAT KUMAR.B.K [ 1MV22EE402], MALLIKARJUNA [1MV22EE418] a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature Guide Dr.Suresh.H.L.

Signature of Dr.Suresh.H.L.

**PRINCIPAL** SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishpadevaravanegsi, Hunasamaranahalli Intelliguature of Principallore-562 157 Prof. Rakesh.S.G.

**INTERNAL VIVA** 

Name of Examiners

1. Dr. Ashur'ni AV 2. Dr. Rethe S

Signature with Date

"Jnana Sangama", Belagavi-590 018



#### Mini Project Report

on

# "MODELING & SIMULATION OF DSTATCOM FOR POWER QUALITY ENHANCEMENT IN DISTRIBUTION SYSTEM"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

AISHWARYA.S.S.

1MV21EE004

PRIYANKA.T.

1MV21EE041

PRAJWAL.A.

1MV22EE431

SRIKANTH.S.

1MV22EE442

Under the Guidance of Dr. Suresh.H.L.

Professor & Head,

Dept. of Electrical & Electronics Eng.,

SIR M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the Mini Project work entitled "MODELING & SIMULATION OF DSTATCOM FOR POWER QUALITY ENHANCEMENT IN DISTRIBUTION SYSTEM" carried out by AISHWARYA.S.S.[1MV21EE004],PRIYANKA.T. [1MV21EE041]PRAJWAL.A[1MV22EE431] , SRIKANTH.S.[1MV22EE442] a bonafide students of Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the abovementioned degree.

Signature of Guide Dr.Suresh.H.L.

Signature of HOD Dr.Suresh.H.L.

PRINCIPAL
SIGNATURE OF Principal CHNOLOGY IK M. VISVESVAKAYA INSTITUTE OF TECHNOLUG Krishnadevarayan agai, Hunasamaranahalii International Airport Road, Bangalore-562 157

Name of Examiner

INTERNAL VIVA

1. Ar. Ashorini . A. V

2. Dr. Letha S

1. V. Admorni 30/7/24 20/4/24

"Jnana Sangama", Belagavi-590 018



#### Mini-Project Report

on

#### "SOLAR TRACKER SUNFLOWER BASED MODEL USING ARDUINO"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

### Submitted by

KANDURI THARUNI	-	1MV22EE415
SUCHITH LAWRENCE	-	1MV22EE444
SWATHI J	-	1MV22EE446
VENNILA KIRAN A C	-	1MV22EE453

#### Under the Guidance of

Dr. Mahesh.K.

Professor

Department of Electrical & Electronics Engineering.,

SIR M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

# Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

(Affiliated to VTU, Belagavi Approved by AICTE New Delhi, , Accredited by NAAC and NBA,)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

**Department of Electrical & Electronics Engineering** 



#### **CERTIFICATE**

Certified that the mini project work entitled "SOLAR TRACKER SUNFLOWER BASED MODEL USING ARDUINO" carried out by KANDURI THARUNI, (1MV22EE415), SUCHITH LAWRENCE, (1MV22EE444), SWATHI J, (1MV22EE446), VENNILA KIRAN A C, (1MV22EE453), bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini-Project work report has been approved as it satisfies the academic requirements in respect of miniproject work prescribed for the above-mentioned degree.

Signature Guide Dr. Mallesh.K. Signature of HOD Dr. Suresh. H. L. PRINCIPAL
SIR M. VISVÈSVARMA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Hunasamaranahalli
Krishnadevarayanagar, Hunasamaranahalli
Interspinal Arbort Road, Bangalore-562 157
Interspinal Transpirature of Principal
Prof. Rakesh.S.G.

INTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. Rethas 2. Dr. Ashoini, AV

39/2/24

"Jnana Sangama", Belagavi-590 018



Mini-Project Report

on

# "SELF-BALANCING VEHICLE USING BATTERY"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

NISCHITH RAJ L.C - 1MV21EE039

RAKSHITA MAHESH KANTHI - 1MV21EE042

**SUMITH BABU.S - 1MV21EE058** 

VINDYA.P - 1MV21EE064

Under the Guidance of

Ms. P. Kezia Joy Kumari Assistant Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, **Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



# **CERTIFICATE**

Certified that the mini project work entitled "Self-Balancing Vehicle Using Battery" carried out by NISCHITH RAJ L.C (1MV21EE039), RAKSHITA MAHESH KANTHI (1MV21EE042), SUMITH BABU.S (1MV21EE058), VINDYA.P (1MV21EE064) a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Ms. P. Kezia Joy Kumari

Dr. Suresh H.L.

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamararahalli InternSignature of Principale-502 157

Prof. Rakesh S.G.

**INTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Ashur'in AV 2. Dr. Rethe s

"Jnana Sangama", Belagavi-590 018



Mini project Report

"Speed Control and Monitoring of Induction Motor using IOT"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

DARSHAN M L

- 1MV21EE013

KRUTHIK GOWDA M - 1MV21EE027

SELVA KANNAN K

- 1MV21EE046

SHARAN R

-1MV21EE047

Under the Guidance of

Mr. Pradeep Kumar,

Asst. Professor,

Dept. of Electrical & Electronics Engineering



**Department of Electrical & Electronics Engineering** 

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru-562157

Department of Electrical & Electronics Engineering



# CERTIFICATE

Certified that the mini project work entitled 'Speed Control and Monitoring of Induction Motor Using IOT' carried out by DARSHAN ML, USN [1MV21EE013], KRUTHIK GOWDAM, USN [1MV21EE027], SELVA KANNAN K, USN [1MV21EE046], SHARAN R, USN [1MV21EE047] a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini project work report has been approved as it satisfies the academic requirements in respect of min project work prescribed for the above-mentioned degree.

PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayansgar, Hunasamaranahalli International Airport Rend Bangalore-562 157

Prof. Rakesh S.G.

raden Kumar

Signature of HOD Dr.P.S.P.Esh & HEAD DEPT, OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadavarayanagar, Hunasameranaha® (Vla) Yelahanka, Bengaturu - 502 157

INTERNAL VIVA-VOCE

Name of Examiners

Signature with Date

1. Dr. Rethas 2. Njoyalakshi

- 10/24 20.10/24

"Jnana Sangama", Belagavi-590 018



# **Mini-Project Report**

on

# "SIMULATION AND IMPLEMENTATION OF SOLAR MICRO-**INVERTER"**

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

BHARATH BHUSHAN.

1MV21EE008

MANOJ S.C.

1MV21EE033

MD RIZWAN KHAN.P.

1MV21EE034

SAI PRABODH.M. GUJJAR 1MV22EE435

Under the Guidance of

Mr. KUMARASWAMY R.

Assistant. Professor,

Dept. of Electrical & Electronics Eng.,

Sir M.VIT, Bengaluru.



# **Department of Electrical & Electronics Engineering**

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, affiliated to VTU, Belagavi, NAAC and NBA Accredited) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, affiliated to VTU, Belagavi, NAAC and NBA Accredited)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

**Department of Electrical & Electronics Engineering** 



### **CERTIFICATE**

Certified that the project work entitled "SIMULATION AND IMPLEMENTATION OF SOLAR MICRO-INVERTER" carried out by, BHARATH BHUSHAN(1MV21EE008), MANOJ S.C. (1MV21EE033), MD RIZWAN KHAN.P(1MV21EE034), SAI PRABODH.M.GUJJAR (1MV22EE435) are Bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Mr. Kumaraswamy. R.

Signature of HOD Dr. Suresh H.L. PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar, Hunasamaranahalli
International Airport Road, Bangalore, 562 157
Signature of Principal

Prof. Rakesh S.G.

**EXTERNAL VIVA** 

NAME OF THE EXAMINERS

1. Dr. R. Sivapriyan

2. Ma . Enmasaswamy . R.

SIGNATURE AND DATE

2/8

"Jnana Sangama", Belagavi-590 018



**Mini-Project Report** 

on

# "EFFICIENT DUAL AXIS SOLAR TRACKING SYSTEM WITH HOME AUTOMATION"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

PRANATHI S - 1MV21EE040

THRISHA R - 1MV21EE060

VAIBHAV S - 1MV21EE062 VIJAYKUMAR G - 1MV22EE455

Under the Guidance of

Ms.Sandra M,
Assisstant Professor,
Dept. of Electrical & Electronics Eng.,
Sir MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



# **CERTIFICATE**

Certified that the project work entitled "Efficient Dual Axis Solar Tracking System With Home Automation" carried out by PRANATHI S, USN 1MV21EE040, THRISHA R, USN 1MV21EE060, VAIBHAV S, USN 1MV21EE062, VIJAY KUMAR G, USN 1MV22EE455 a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Ms. Sandra .M Signature of HOD Dr. Suresh H L

SIR M. HSVASVAKA A INSTITUTE OF TECHNOLOGY Krishaddovarayanagah, Humasamaranahalli International Airport Road, Bangalore-562 157

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1. Dr. Admini AV. 2. Dr. Replas

3113/24

"Jnana Sangama", Belagavi - 590 018



# **Mini-Project Report**

on

#### "CROP PROTECTION USING SOLAR ENERGY SYSTEM"

submitted in partial fulfillment of the requirements for the award of the Degree of

# **BACHELOR OF ENGINEERING**

#### IN

### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

ABHISHEK KUMAR	1MV21EE003
KHIVAN AVTAR	1MV21EE024
UZMA ALMAS	1MV21EE061
VIHAN C SINGE	1MV21EE063

#### Under the Guidance of

Ms. Vijayalakshmi A.K,
Assistant Professor,
Department of Electrical & Electronics Engineering,
Sir MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU-Belagavi, Recognized by AICTE and Accredited by NBA & NAAC)

Krishnadevarayanagar, Off International Airport Road, Hunasamaranahalli,

Bengaluru – 562 157

(Affiliated to VTU-Belagavi, Recognized by AICTE and Accredited by NBA & NAAC) Krishnadevarayanagar, Off International Airport Road, Hunasamaranahalli, Bengaluru – 562 157

**Department of Electrical & Electronics Engineering** 



# **CERTIFICATE**

Certified that the mini project work entitled "CROP PROTECTION USING SOLAR ENERGY SYSTEM" carried out by Abhishek Kumar 1MV21EE003, Khivan Avtar Uzma Almas 1MV21EE061, Vihan C Singe 1MV21EE063 bonafide students of Sir M. Visvesvaraya Institute Of Technology, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature Guide Ms. Vijayalakshmi A.K

Signature of HO Dr. Suresh H.L. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasemaranahalli International Arreort Road, Bangalore-562 157
International Arreort Principal
Prof. Pol.

Prof. Rakesh S.G.

INTERNAL VIVA-VOCE

Name of Examiners

Dr. Rekhas

Signature with Date

"Jnana Sangama", Belagavi-590 018



Mini-Project Report

on

# "FAULT DETECTION IN POWER SYSTEM USING DATA ANALYTIC TECHNIQUE BY WEKA SOFTWARE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

MOHAMMED TAWAKKAL	1MV21EE037
NAMRATHA S B	1MV21EE038
RAGHU S	1MV22EE432
VIJAYAKUMAR	1MV22EE456

Under the Guidance of
Ms.Vijayalakshmi A K
Assistant Professor,
Dept. of Electrical & Electronics Eng.,
Sir MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



# **CERTIFICATE**

Certified that the project work entitled "FAULT DETECTION IN POWER SYSTEMS USING DATA ANALYTIC TECHNIQUE BY WEKA SOFTWARE" carried out by, MOHAMMED TAWAKKAL [1MV21EE037], NAMRATHA.S.B [1MV21EE038], RAGHU.S [1MV22EE432], VIJAYAKUMAR [1MV22EE456], a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Ms. Vijayalakshmi A K Dr. Suresh H L

Signature of Principal

INTERNAL VIVA

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Kriehwadevarayanagar, Hunasamaranahalli International Amort Ross, Bangalore-562 157

Name of Examiners

Signature with Date

1. Dr. Rekta S 2. Dr. Ashurini AV

"Jnana Sangama", Belagavi-590 018



**Mini-Project Report** 

On

# "Visual Object Tracking Based on Backward Model Validation"

submitted in partial fulfillment of the requirements for the award of the Degree of

### **BACHELOR OF ENGINEERING**

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

ANUSHA BASANAGOWDA HATTI	1MV21EE005
ARUN KUMAR	1MV21EE006
DURGA K	1MV21EE014
NAVEEN KUMAR N	1MV22EE427

Under the Guidance of

Ms Harshithananda.B. Assistant Professor,



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –

562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the mini project work entitled "Visual Object Tracking Based on Backward Model Validation" carried out by, ANUSHA BASANAGOWDA HATTI[1MV21EE005] ARUN KUMAR[1MV21EE006] DURGA K [1MV21EE014], NAVEEN KUMAR N [ 1MV22EE427]a bonafide students of Sir M .VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department-library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature Guide Ms. Harshithananda. B.

01/08/24 Signature of HOD

Dr. Suresh H.L

PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Afreort Road, Bangalore-562 157 Signature of Principal

Prof. Rakesh S.G.

**INTERNAL VIVA** 

Name of The Examiner

1. Dr. Rekha S

2. R. SIVARRIYON

Signature with Date

"Jnana Sangama", Belagavi-590 018



# Mini Project Report

Or

# "APPLICATIONS OF AUGMENTED REALITY IN ELECTRICAL ENGINEERING"

Submitted in partial fulfillment of the requirements for the award of the degree of

### **BACHELOR OF ENGINEERING**

IN

# ELECTRICAL & ELECTRONICS ENGINEERING Submitted by

**AASTHA** 

1MV21EE001

JAYSHREE.V.S

1MV21EE018

MAHESH.M.A

1MV22EE417

**MANJUNATH.M.S** 

1MV22EE419

#### Under the Guidance of

Dr.R.Sivapriyan.
Associate Professor.
Dept. of Electrical & Electronics Engineering



# Department of Electrical & Electronics Engineering Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the mini project work entitled "Applications of Augmented Reality in Electrical Engineering "carried out by AASTHA [1MV21EE001], JAYSHREE V S [1MV21EE018], MAHESH M A [ 1MV22EE417], MANJUNATHA M S [1MV22EE419] a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini project work report has been approved as it satisfies the academic requirements in respect of mini PRINCIPAL project work prescribed for the above-mentioned degree.

Dr.R.Sivapriyan.

Dr.Suresh.H.L.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Almort Road, Bangalore-562 157

Prof. Rakesh.S.G.

#### **INTERNAL VIVA**

Name of Examiners

Signature with Date

1. Dr. Siddapojjihuz 2. M. R. Sivapniyan

Mr Bening

"Jnana Sangama", Belagavi-590 018



### Mini-Project Report

on

# "IOT BASED ECO-FRIENDLY SMART BIN"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

# **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

CHAITRA R S	1MV22EE406
MANOJ H P	<b>1MV22EE420</b>
MANOJ KUMAR Y	<b>1MV22EE421</b>
PAVAN S	1MV22EE429

Under the Guidance of

#### Mrs. P. Sumalatha

Assistant Professor,
Dept. of Electrical & Electronics Eng.,
Sir M. VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by 0AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, **Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



### CERTIFICATE

Certified that the mini project work entitled "IOT BASED ECO-FRIENDLY SMART BIN" carried out by CHAITRA R.S. [1MV22EE406], MANOJ H.P. [1MV22EE420], MANOJ KUMAR.Y [1MV22EE421], PAVAN.S [1MV22EE429] Bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini Project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the abovementioned degree. PRINCIPAL

Signature of Guide Mrs. P. Sumalatha.

Dr. Suresh H.L.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayenegar, Hunasamaranahalli Internaliguartupo et Rr incipal e-562 157 Prof. Rakesh S.G.

# INTERNAL VIVA

Name Of Examiner

1. Dr. Rekla S 2. Harshithanando B.

Signature With Date

"Jnana Sangama", Belagavi-590 018



# Mini-Project Report

or

#### "SMART TRAFFIC MANAGEMENT"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

HARISH D.B - 1MV22EE411 JAYAKRISHNA.M - 1MV22EE414 REKHA R.T - 1MV22EE433 S. RAKSHITHA- 1MV22EE434

Under the Guidance of

Ms. SANDRA M,
Assistant Professor,
Dept. of Electrical & Electronics Eng.,
Sir MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the project work entitled "SMART TRAFFIC MANAGEMENT" carried out by HARISH D.B. (1MV22EE411), JAYAKRISHNA.M.(1MV22EE414), REKHA R.T. (1MV22EE433), S.RAKSHITHA, (1MV22EE434)a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini-Project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature Guide Ms. Sandra M

Signature of HC Dr. Suresh H.L. PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnedevarayanagar, Hunasamaranahaki (Vla) Yelshanka, Bengaluru - 582 157

Signature of Principal

SIR M. PISYES PRAINCES IN STITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahalli International Afront Road, Bangalore-562 157

#### INTERNAL VIVA

Name of Examiners

Signature with Date

1. Dr. R. Sivapriyan. R. Ser orlos

2. Mr. kumarasevany. R. 2 orle/ 02/

"Jnana Sangama", Belagavi-590 018



#### Mini Project Report

on

## "MODELING AND SIMULATION OF SOLAR AND WIND ENERGY SYSTEM"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

BHAVANA.T.S.

1MV22EE404

BHUVANESHWARI.M.

1MV22EE405

GAGAN.S.

1MV22EE409

SUDARSHANA.V.N.

1MV22EE445

Under the Guidance of
Mrs. P. Sumalatha
Assistant Professor,
Dept. of Electrical & Electronics Eng.,
SIR M.VIT, Bengaluru.



**Department of Electrical & Electronics Engineering** 

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempe Gowda International Airport Road, Krishnadevaraya

Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Mini Project work entitled "MODELING AND SIMULATION OF SOLAR AND WIND **ENERGY** SYSTEM" carried out by BHAVANA.T.S. [1MV22EE404], BHUVANESHWARI.M. [1MV22EE405], GAGAN.S. [1MV22EE409], SUDARASHANA.V.N. [1MV22EE445] a bonafide students of Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the above- mentioned degree.

Signature of Guide Mrs. P. Sumalatha

Signature of Dr. Suresh. H.L.

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLO Krishnadevarayanagar, Hunasamaranahalli Spending Was Principal galore-562 15

Prof. Rakesh. S.G.

INTERNAL VIVA

Name of Examiner

Signature with Date

1. Dr. Rekha s 2. Njerjaldschuz SK

"Jnana Sangama", Belagavi-590 018



Mini-Project Report On

#### "SMART BATTERY MANAGEMENT SYSTEM"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**NAVYA** N

- 1MV22EE428

SANJEEVA KUMARA - 1MV22EE437

SHREESHAIL TEJI - 1MV22EE441

Under the Guidance of

Mrs. D. Beula

Associate professor

Dept. of Electrical & Electronics Eng.,

Sir MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the mini project work entitled "SMART BATTERY MANAGEMENT SYSTEM "carried out by NAVYA N, USN 1MV22EE428, SANJEEV KUMARA, USN 1MV22EE437,SHREESHAIL TEJI, USN 1MV22EE441, a Bonafede students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Mrs. D. Beula

Signature of HOD

Dr. Suresh.H.L.

PRINCIPAL

CR NO WOONARAYA INSTITUTE OF TECHNOLOGY மிரி அக்கள்ளாக yanagar, Hunasamaranahalli

Signature of Principal Prof. Rakesh.S.G.

BROK! & HEAD DEPT. OF ELECTRICAL & ELECTRONICS ENGO. SIR M. VISVESYARATA HISTITUTE OF TECHNOLOGY Krishnadavareyanagar, Hunasameranahalil

(Via) Yelahanka, Bengaluru - 552 157

INTERNAL VIVA

Name of Examiners

1. Dr. K. Sivapniyan

2. Dr. Siddappaji M.R

Signature with date

R. See Willy

"Jnana Sangama", Belagavi-590 018



#### Mini-Project Report

on

## "RENEWABLE ENERGY CONSERVATION SYSYTEM BASED ON PERMANENT MAGNET SYNCHRONOUS GENERATOR USING MATLAB"

Submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

# IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SYED SUBHAN	1MV22EE447
TARKESH KUMARCC	1MV22EE450
MOHAMMED AEYTESHAM AHMED	1MV22EE422
MAHANTHESH KR	1MV22EE416

#### Under the Guidance of

#### Mr. Bhaskar C

Assistant Professor,
Dept. of Electrical & Electronics Eng.,
Sir MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified Out the Project work entitled "RENEWABLE ENERGY CONSERVATION SYSYTEM BASED ON PERMANENT MAGNET SYNCHRONOUS GENERATOR USING MATLAB" Carried Out by SYED SUBHAN, USN 1MV22EE447, TARKESHKUMAR C C, USN 1MV22EE450, MOHAMMED AEYTESHAM AHMED, USN 1MV22EE422, MAHANTHESH K R, USN1MV22EE416 a bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Project work report has been approved as it satisfies the academic requirements in respect of project work prescribed for the above-mentioned degree.

Signature Guide Mr. Bhaskar C

Signature of HOD Dr. H L Suresh

PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
NICHARD AND STREET OF PRINCIPAL SECTION OF THE PRINCIPAL SECTION OF THE SECTION OF THE

Prof. Rakesh S.G.

**EXTERNAL VIVA** 

Name of Examiners

Signature with Date

1.DV. Ashurin'. AV 2.Dr. Rekha S

Beloh

#### VISVESVARAYA TECHNOLOGICAL TECHNOLOGY

"Jnana Sangama", Belagavi-590 018



on

#### "POWER FILTERS COMPARISION"

submitted in partial fulfilment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

NATARAJA T J	1MV22EE426
TABREZ ASHRAFF	1MV22EE449
VENUKUMAR A P	1MV22EE454
VINAY D S	1MV22EE457

Under the Guidance of

Mr. Bhaskar C

Assistant professor

Dept of Electrical & Electronic Engg.,

SIR.M.VIT, Bengaluru.



#### **Department of Electrical & Electronics Engineering**

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru -562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)
Off kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the mini project work entitled "POWER FILTERS COMPARISION" carried out by Mr. NATARAJA T J (1MV22EE426), Mr. TABREZ ASHRAFF (1MV22EE449), Mr. VENUKUMAR A P(1MV22EE454), Mr. VINAY D S (1MV22EE457) a Bonafide students of Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature of Guide Mr. Bhaskar C Signature of HOD

Dr. Suresh HEAD

PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanayar, Hunasamaranahalli
Intervilinal Intervalia Principal
Prof. Rakesh S.G.

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevarayanagar, Humanamaranahali
(N.S.) Yalahanda, Bangaburu - 562 157

INTERNAL VIVA

Name of examiner

1. Dr. R. Sivapolyan

2. Do. Siddappaji. M.R.

Signature with date

HR Ben 5/8/21.

"Jnana Sangama", Belagavi-590 018



on

"Adaptive Vehicle Headlight System"

submitted in partial fulfillment of the requirements for the award of the Degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

#### Submitted by

AAYUSHI SRIVASTAVA	1MV21EE002
MIKET KUMAR	1MV21EE035
SHIVAM KUMAR	1MV21EE049
SPARSH KUMAR	1MV21EE054

#### Under the Guidance of

Mrs. Bindiya Tyagi
Assistant Professor
Dept of Electrical & Electronics Engg.
SIR MVIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

**Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the mini project work entitled "Adaptive Vehicle Headlight System" carried out by Ms. AAYUSHI SRIVASTAVA (1MV21EE002), Mr. MIKET KUMAR (1MV21EE035), Mr. SHIVAM KUMAR (1MV21EE054) and Mr. SPARSH KUMAR (1MV22EE054) bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, BENGALURU in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023- 2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree. PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Mrs. Bindiya Tyagi

Dr. Suresh H. L.

Prof. Rakesh S. G.

Krishaadevarayanagar, Hunasamaranahalli International Atracti Scott Bangalore-562 157

INTERNAL VIVA-VOCE

Name of Examiners

1. Dr. Ishwini AV
2. Dr. Rethas

Signature with Date

"Jnana Sangama", Belagavi-590 018



Mini Project Report

on

# "SIMULATION AND ANALYSIS OF POWER ELECTRONIC CONVERTERS"

submitted in partial fulfillment of the requirements for the award of the Degree of

## **BACHELOR OF ENGINEERING**

IN

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

	•
SHIBAJEET MUKHERJEE	(1MV21EE048)
SHIVAM PANDEY	(1MV21EE050)
SULAIM AHMED	(1MV21EE057)
SYED ZUBEAR AHMED	(1MV22EE448)
DIED ECELE	

Under the Guidance of
Mrs. Bindiya Tyagi
Assistant Professor
Dept of Electrical & Electronics Eng.,
SIR M. VIT, Bengaluru.



## **Department of Electrical & Electronics Engineering**

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA))
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

**Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the mini project work entitled "Simulation and Analysis of Power Electronic Converters" carried out by Mr. SHIBAJEET MUKHERJEE (1MV21EE048), Mr. SHIVAM PANDEY (1MV21EE050), Mr. SULAIM AHMED (1MV21EE057) and Mr. SYED ZUBEAR AHMED (1MV22EE448) bonafide students of Sir M VISVESVARAYA **INSTITUTE OF TECHNOLOGY, BENGALURU** in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree. PRINCIPAL SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY

Signature Guide

Mrs. Bindiya Tyagi

Dr. Suresh H. L.

Krishnadevarayanagar, Hunasamaranahalli International Airport Road Bangalore-562 157
Signature of Principal

Prof. Rakesh S. G.

INTERNAL VIVA-VOCE

Name of Examiners

1. Dr. Retha S

Signature with Date

"Jnana Sangama", Belagavi-590 018



#### Mini Project Report

on

#### "ELECTRICITY BILLING SYSTEM"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

SPOORTHI M

1MV21EE055

MOHAN PRASAD V

1MV22EE424

SHRAVAN KUMAR B

1MV22EE440

VISHAL V S

1MV22EE458

Under the Guidance of **Dr. Ashwini. AV** 

Assistant Professor,

Dept. of Electrical & Electronics Eng., SIR M.VIT, Bengaluru.



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the Mini Project work entitled "ELECTRICITY BILLING SYSTEM" carried out by SPOORTHI.M[1MV21EE055],MOHAN PRASAD V[1MV22EE424], SHRAVAN KUMAR B [1MV22EE440], VISHAL V S[1MV22EE458] a bonafide students of Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the above-mentioned degree.

Signature of Guide Dr.Ashwini AV

Signature of HOD Dr.Suresh.H.L. PRINCIPAL
SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY
Krishnadevarayanagar J. Principal anahalli
Internation Signature of Principal anahalli
Prof. Rakesh. S. O. Fore-562 157

Name of Examiner

INTERNAL VIVA

Signature with Date

1. Dr. Rekha S

2. Dr. Asherini BV

68124

"Jnana Sangama", Belagavi-590 018



on

"PERFORMANCE ANALYSIS OF VARIOUS MACHINE LEARNING ALGORITHMS OF REMAINING USEFUL LIFE(RUL) FOR LITHIUM ION BATTERIES"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

## **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

AVESH KHARANI

1MV21EE007

DARSHAN.H.B

1MV21EE012

KASA VANDANA

1MV21EE023

LAKSHMI.K.G

1MV21EE030

#### Under the Guidance of

Mrs. Rekha Radhakrishnan Assistant Professor Dept. of Electrical & Electronics Eng., SIR M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the Mini Project work entitled "PERFORMANCE ANALYSIS OF REMAINING USEFUL LIFE (RUL) FOR LITHIUM ION BATTERIES" carried out by AVESHKHARANI [1MV21EE007], DARSHAN H.B [1MV21EE012], KASAVANDANA [1MV21EE023], LAKSHMI K.G [1MV21EE030], bonafide students of Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the above- mentioned degree.

Signature of Guide Mrs. Rekha Radhakrishnan

Dr. Suresh H.L.

PRINCIPAL

SIR M. VISVĖSVARAYA INSTITUTE OF TECHNOLOGY [8]24 Krishnadevarayanagar, Hunasamaranahalli

International Accort Printerparty alore-562 157

Prof. Rakesh S.G.

Name of Examiner

INTERNAL VIVA

Signature with Date

1. Dr. Rekha S 2. Av Ashwini · A V

"Jnana Sangama", Belagavi-590 018



#### Mini Project Report

on

## "A FOUR PORT DC-DC CONVERTER FOR A STANDALONE WIND AND SOLAR ENERGY"

submitted in partial fulfillment of the requirements for the award of the degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

#### Submitted by

TEJAS MOURYA. L. V 1MV21EE059 SANJAY. S. P 1MV22EE436 SANTHOSH. M 1MV22EE438

SUCHIT 1MV22EE443

Under the Guidance of
Mrs. Harshithananda. B
Assistant Professor,
Dept. of Electrical & Electronics Engineering

SIR M.VIT, Bengaluru.



#### Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

**Bengaluru** – **562157** 

Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the Mini Project work entitled "A FOUR PORT DC-DC CONVERTER FOR A STANDALONE WIND AND SOLAR ENERGY" carried out by TEJAS MOURYA.L.V [1MV21EE059], SANJAY.S.P [MV22EE436], SANTHOSH.M [1MV22EE438]. SUCHIT [1MV22EE443] a bonafide students of Sir M.VISVESVARAYA INSTITUTEOF **TECHNOLOGY**, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report kas been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the above-PRINCIPAL mentioned degree.

18/24 1/8/24 Signature of Guide Mrs. Harshithananda, B

Signature of Ho Dr.Suresh. H. L. PROF. & HEAD SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishaadevarayanagar, Hunasamaranah International Afreca Road Bangaiore-562 157 Prof. Rakesh.S. G.

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunceamaranahak

(Via) Yelahanka, Bengaluru - 562 157

Name of Examiner

INTERNAL VIVA

Signature with Date

1. Dr. Rekha s 2. Harshithauande B.

Pell 1/8/24
18/124

"Jnana Sangama", Belagavi-590 018



#### **Mini-Project Report**

on

#### "IMAGE PROCESSING USING FPV DRONE"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

IN

#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**SANTOSH** 

- 1MV22EE439

**PAVANKUMAR** 

- 1MV22EE430

VEERESH KUMAR NAVALAGUND

-1MV22EE452

Under the Guidance of

Ms. P. Kezia Joy Kumari Assistant Professor



## **Department of Electrical & Electronics Engineering**

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

Certified that the mini project work entitled "Image processing using FPV drone" carried out by

SANTOSH (1MV22EE439), PAVANKUMAR (1MV22EE430), VEERESH KUMAR NAVALAGUND (1MV22EE452), a bonafide students of Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the above-mentioned degree.

Signature Guide Ms. P Kezia Joy Kumari Signature of HOD Dr. Suresh H.L.

PROF. & HEAD
DEPT, OF ELECTRICAL & ELECTRONICS EMGG.
SIR M. YISVESYARAYA INSTITUTE OF TECHNOLOG:
Krishnadevarsyanogar, Hunesamaranahali
(Via) Yelaharika, Bengahuru - 862 187

INTERNAL VIVA

Signature of Principal Prof. Rakesh S.G.

(1)

PRINCIPAL

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevarayanagar, Hunasamaranahali International Airport Road, Bangalore-562

Name of Examiners

Signature with Date

1. Dr. REKHA S

"Jnana Sangama", Belagavi-590 018



#### Mini-Project Report

## "FAULT ANALYSIS UTILIZING POWER SYSTEM STABILIZER IN INTERCONNECTED NETWORK BY ENHANCING GRID STABILITY"

submitted in partial fulfillment of the requirements for the award of the Degree of

#### **BACHELOR OF ENGINEERING**

#### IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

**BHARATH R** 

-1MV22EE403

CHANNABASAVA G - 1MV22EE407

HARSHA G J

-1MV22EE412

#### Under the Guidance of

Dr. Siddappaji M. R Assistant Professor, Dept. of Electrical & Electronics Eng., Sir MVIT, Bengaluru.



## **Department of Electrical & Electronics Engineering** Sir M VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

Certified that the mini project work entitled "FAULT ANALYSIS UTILIZING POWER SYSTEM STABILIZER IN INTERCONNECTED NETWORK BY ENHANCING GRID STABILITY " carried out by BHARATH R, USN:1MV22EE403, CHANNABASAVA G, USN:1MV22EE407, HARSHA G J, USN:1MV22EE412, a bonafide students of Sir M VISVESVARAYA INSTITUTE OF **TECHNOLOGY**, Bengaluru in partial fulfillment for the requirements for the award of the degree of Bachelor of Engineering in Electrical & Electronics Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini Project work report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the abovementioned degree.

Dr.Siddappaji M.R

Signature of Dr.Suresh H. L

PRINCIPAL SIR M. VISVESVARAYA INSTITUTE OF TEC Krishnadevarayanagar, Hunasamarr 562 157

Inter Signature of Principal pre Prof.Rakesh S.G

Internal Viva

Name of Examiners

1. Dr. R. Straproyan.
2. Dr. Kumara swany. R.

Signature with Date

"Jnana Sangama", Belagavi-590 018



## Internship Report

on

"Automated Parking System using ML"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by AASTHA 1MV21EE001

Under the Guidance of

Dr. Mahesh K Professor



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



## CERTIFICATE

This is to certify that the INTERNSHIP entitled "Automated Parking System using ML" is carried out by AASTHA of USN 1MV21EE001, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 25<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

Signature of HOD

002

## VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"JnanaSangama",Belagavi-590018



# Internship Report on "AUTOMATED PARKING SYSTEM USING ML"

Submittedinpartial fulfillment fortheawardofthedegree (211NT68)

Submitted by
AAYUSHI SRIVASTAVA
1MV21EE002

UndertheGuidanceof

**Dr. Mahesh K.**Assistant Professor



DepartmentofElectrical&ElectronicsEngineering
SirM.VISVESVARAYAINSTITUTEOFTECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) OffKempegowdaInternationalAirportRoad,KrishnadevarayaNagar,Bengaluru-562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda InternationalAirportRoad,KrishnadevarayaNagar,Bengaluru –562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

This is to certify that the INTERNSHIP entitled "AUTOMATED PARKING SYSTEM USING ML"iscarried out by Ms AAYUSHI SRIVASTAVA of USN 1MV21EE002,a bonafide studentof

SirM.VisvesvarayaInstituteofTechnology,inpartialfulfillmentfortheawardofBachelorofEngine ering,inElectrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It iscertifiedthatallcorrections/suggestions indicated havebeenincorporatedinthereport. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

Signature of HOD

02/08/24

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (211NT68)

Submitted by ABHISHEK KUMAR 1MV21EE003

Under the Guidance of

Dr. Mahesh K Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. ABHISHEK KUMAR of USN IMV21EE003, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics.

Signature of Internal Guide

Signature of HOD

"Juana Sangama", Belagavi-590 018



## Internship Report

on

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by AISHWARYA.S. S 1MV21EE004

Under the Guidance of

Dr. MAHESH. K Professor



# Department of Electrical & Electronics Engineering M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

pproved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)
spegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

## SIC ST. VISVESVARAVA INSTITUTE OF TECHNICICALLY

Expression by ANCTE from Partie, Additional to 4911, Matingary, Recorded by 11/1/1 and 154/1; 1918 Kampegrowda International hisport Hend, Krishnadevaraya Hagas, HARRIGARINAN - SAZINT

## Department of Electrical & Electronics Engineering



It is to contified that the INTERNSHIP entitled "Method to detect, measure, analyze the temperature and vibration of transformers using HOT" is carried out by the candidate AISHWARYA.S.S.(IMV21EE004), from 25th October 2023 to 24th November 2023 who is a bonzáde student el felo Semester at Sir M. Viovesvaraya Institute el Technology, terrada fulfillment of the award of the credits for the academic term 2023-202A, as a part of academic sequirement during his/her Bachelor of Engineering degree from the Vievesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internation report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

"Jnana Sangama", Belagavi-590 018



Internship Report on

# "SUSTAINABLE FARMING"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

## ANUSHA BASANAGOWDA HATTI USN:1MV21EE005

Under the Guidance of

DR. MAHESH K

**Professor** 



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, New Delhi ,Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, New Delhi ,Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,Bengaluru 562157

Department of Electrical & Electronics Engineering



It is to certified that the INTERNSHIP entitled "SUSTAINABLE FARMING" is carried out by the candidate ANUSHA BASANAGOWDA HATTI- 1MV21EE005, from 25<sup>th</sup> October 2023 to 24<sup>th</sup> November 2023, who is a bonfide student of 6<sup>th</sup> semester at Sir M Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Signature of HOD

"Jnana Sangama", Belagavi-590 018



## **ELECTRICAL & ELECTRONICS ENGINEERING**

Internship Diary

## "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS **USING IOT"**

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

ARUN KUMAR 1MV21EE006

Under the Guidance of

Dr.MAHESH.K

Professor

Department of Electrical and Electronics Engineering, Sir M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

## Department of Electrical & Electronics Engineering



#### CERTIFICATE

the temperature and vibration of transformers using HOT" is carried out by the candidate ARUN KUMAR -1MV21EE006, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Signature of HOD

"Jnana Sangama", Belagavi-590 018



## Internship Report

on

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by
BHARATH BHUSHAN S.B
1MV21EE008

Under the Guidance of

Dr. C V Mohan Associate Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyze the temperature and vibration of transformers using IIOT" is carried out by the candidate Bharath Bhushan S.B(1MV21EE008), from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

gnature of HQD

"Inana Sangama", Belagavi-590 018



#### Internship Report On

#### "MACHINE LEARNING WITH PYTHON"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by
AVESH
KHARANI
1MV21EE007

Under the Guidance of

DR.MAHESH .K
Associate Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

# Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

It is to certified that the INTERNSHIP entitled "MACHINE LEARNING WITH PYTHON" is carried out by the candidate AVESH KHARANI-1MV21EE007, from 27th October to 1st December who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the internship report and deposited in thedepartment library. The internship has been approved as it satisfies the academic requirements in respectof internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

\$ignature of Guille

"Juana Sangama", Belagavi-598 618



#### Internship Report

Or

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by CHANDAN, S 1MV21EE009

Under the Guidance of

Dr. C V Mohan Associate Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Rempegowda International Airport Road, Krishnadevaraya Nagur,

Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyze the temperature and vibration of transformers using HOT" is carried out by the candidate Chandan S(1MV21EE009), from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

"Jaana Sangama", Belagavi-590 018



#### Internship Report

on

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by CHANDRASHEKAR K.N 1MV21EE010

Under the Guidance of

Dr. C V Mohan Associate Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Addressed by AICTE Name Dalb). A COUNTY OF THE CHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

#### SICM. VISVESVARAVA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Amhated to VTU, Delagavi, Accredited by HAAC and HIIA)

Off Kempegowda International Airport Road, Krishnadsvaraya Plagar,

Dengaloru = 563.157

Department of Electrical & Electronics Engineering



It is to certified that the INTERNATIP entitled "Method to detect, measure, analyze the temperature and vibration of transformers using HOT" is carried out by the candidate Chandrashekar K.N(IMV21EE010), from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Nemester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internahip report has been approved as it satisfies the academic requirements in respect of internahip work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

"Lunes Saugame", Relayers 590 018



Internship Report ON

#### "NURTURING YOUNG MINDS: A RURAL EDUCATION INITIATIVE AT ANGANWADI"

Submined in partial fulfilineers of the requirements for the award of the Degree (211NT68)

Submitted by

DARSHAN GOWDA P USN: 1MV21EE011

Under the guidance of

Dr. C.V Mohan Associate Professor.



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Supposed by AKTE New Deliv, Additioned to VTU, Belagavi, 180 9001 2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

"----- Relargy1-590 018

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

**Department of Electrical & Electronics Engineering** 



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "NURTURING YOUNG MINDS: A RURAL EDUCATION INITIATIVE AT ANGANWADI " is carried out by the candidate DARSHAN GOWDA P- 1MV21EE011, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Dr. CV Mohan

#### THE CERTIFICATE PROVIDED BY THE ANGANWADI



#### **Anganwadi Kendra**

Nelkunte, Bangalore North Taluk, Bengaluru Urban District

#### INTERNSHIP COMPLETION CERTIFICATE

This is to certify that Darshan Gowda P, the student of Sir M Visvesvaraya Institute of Technology bearing the USN 1MV21EE011 has successfully completed the INTERNSHIP entitled Societal related activities at Anganwadi Kendra, from 25-10-23 to 24-11-23.

During this period, he was actively involved in assisting students with their learning activities. He demonstrated a high level of commitment, responsibility, and enthusiasm in performing his duties and contributed significantly to the educational development of the students.

Issuing Person's Name: H. KOMALA.

Designation: 132 ಕಲನೆಗಳು.

Signature M. KoHala.

ಅಂಗಳವಾಡಿ ಕಾರ್ಯಕರ್ನ ಬೆಗ್ಗಹಲಸೂರು II ಬೆಂಗಳೂರು ಉತ್ತರ

"Jnana Sangama", Belagavi-590 018



Internship Report On

#### "MACHINE LEARNING WITH PYTHON"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by DARSHAN HB 1MV21EE012

Under the Guidance of

C.V.MOHAN Associate Professor



Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

# Sir M. VISVESVARAVA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VIII, Delagari, 18O 9001-2008 Certified) Off Konyagowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "MACHINE LEARNING WITH PYTHON" is carried out by the candidate DARSHAN HB-IMV21EE012, from 27th October to 1st December will's a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the internship report and deposited in thedepartment library. The internship has been approved as it satisfies the academic requirements in respectof internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.



#### CERTIFICATE OF INTERNSHIP

This is to certify that Darshan HB whose USA is 14M/2144012, has completed their Machine Learning with Python (Research Based) Weernship organised and handled by Compsolt Technologies from 27\* October, 2023 to 1\* December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Chatbot for Healthcare System Using Al for UE Improvement Program, As part of the project, They designed the Machine Learning Model, Demonstrated and tested the working of the Model, Prepared a report highlighing its flaws by understanding the design briefs and client Specifications that were provided in the Proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, carde make



Mithin KS &

A STATE OF THE STA

HHOLOGIE

No. 363, 39 main read,

1" Block Kajajinagar Bangalore - 560010 CARFORNIS CONSTRACTORIS COMO COMO

HAPH COMMENTANCE OF CHING KANG

This cartificate was generated using contribut other

"Inana Sanyama", Bidayari 599 018



#### Internship Report

in

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IMIT

Submitted in partial fulfilment for the award of degree (21198198)

Submitted by DARSHAN M L 1MV21EE013

Under the Casidanse of

Dr. C.V. MOHAN
Associate Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off Kempegowda International Airport Road, Krishmadevaraya Nagar Bengaluru - 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyze the temperature and vibration of transformers using HOT" is carried out by the candidate DARSHAN M L(1MV21EE013), from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

#### Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 5600°2

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, **Darshan ML**, 6th Semester - EFE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd.

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

cro

Harmonizer India Pvt Ltd

Dr. Suresh H L

G-h

HOD - EEE.

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. 557, 1st Main, 15th Cross, RHCS Layout, Prigandhadakavalu, Nagarthavi,

"Jnana Sangama", Belagavi-590 018



### Internship Report on "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (211NT68)

Submitted by DURGA K 1MV21EE014

Under the Guidance of

Dr.C.V. Mohan Associate Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kenpegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Ms.Durga K of USN-1MV21EE014, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



#### CERTIFICATE OF INTERNSHIP

This is to certify that Durga K whose USN is 1MV21EE014, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Web Template to build Interactive Resume on Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLICK HERE

OLOGIES PVT. LTD

www.varconstech.com

contact@varconstech.com

M G Road, Ciscor, Bangelore-560001

This certificate was generated using CERTIFITY COM

"Jnana Sangama", Belagavi-590 018



Internship Report on

#### "SUSTAINABLE FARMING"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

INDUMATHI T C 1MV21EE016

Under the Guidance of

Mrs. D Beula

Associate Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to be certified that the INTERNSHIP entitled "SUSTAINABLE FARMING" is carried out by the candidate INDUMATHI T C - 1MV21EE016, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

#### THE CERTIFICATE PROVIDED BY THE COMPANY



# CERTIFICATE



This is to certify that,

# Indumathi.T.C (1MV21EE016)

societal domain, from 26-10-2023 to 23-11-2023 in Krishi Vigyaan Kendra has successfully completed one-month short term Internship under the (Taluk Agriculture Office Holalkere, Chitradurga)

GURUMURTHY.K.T
Vice-president

(taluk agriculture office Holalkere)

KUMAR.N Senior-asstitant director

of Horticulture

"Juana Sangama", Belagavi-590 fil8



#### Internship Report

on

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

#### JAYSHREE VS 1MV21EE018

Under the Guidance of

Mrs. D. Beula
Associate Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using HOT" is carried out by the candidate JAYSHREE VS-1MV21EE018, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Signature of Guide



#### HARMONIZER INDIA PVT LTD

1998. Anjanadri, 2nd floor, 11th Block, Martingappa Extension, Bangalom, Kariotoka 560099

#### CERTIFICATE OF INTERNSHIP

This is to Cartify that, Jayshree Y S , oth Hemester - EEE at Sir M Visyesyarnya Institute of Technology Bengaluru, has corried out the Internship conducted by Harmonizer India Pvi Lid

Tople: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internalily Periodi agth October 2023 to 24th November 2023

And the second state of the second second second second

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CIO

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. 557, 1st Main, 15th Cross, NHCS Layout, Reigandhadakavalu Negarbhavi,

Dr. Suresh H L

8---

HOD . EEE

filr M Visveavaraya Institute of Technology

"Jnana Sangama", Belagavi-590 018



Internship Report

on

"Entrepreneurship in Drone Components Manufacturing Industry"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by
K.B. MITHUN CARIAPPA
1MV21EE019

Under the Guidance of Ms. D. Beula

Associate Professor



### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Entrepreneurship in Drone Components candidate K.B carried out by the is Industry" Manufacturing CARIAPPA(1MV21EE019), from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

#### Certificate issued by Dyut Motors



#### DyutMotors

#### CERTIFICATE OF INTERNSHIP

This aestificate acknowledges that K B Mithun Cariappa, bearing USN 1MV21EE019 of Sir. M. Visvesvaraya Institute Of Technology, has satisfactorily completed an Internship program within the Entrepreneurship Category at Dyut Motors from October 25, 2023, to November 23, 2023.

The recipient of this certification has actively participated in diverse activities vital to the company's establishment phase, testing, prototyping, and the manufacturing processes of our products.

During the course of intenship, they demonstrated good design skills with a self-motivated attitude to learn new things. Their performance exceeded expectations and was able to complete the tasks assigned successfully.

Bhavya K S
FOUNDER
BYUT MOTORS
873B. GEYE Layout.
5en Famus Arcade Rd.
Jakker, Bengakers - 560064



Lychled that you stay again the habit to

"Inana Sangama", Belagavi-590 018



#### Internship Dairy on

"SUSTAINABLE FARMING"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

K. UDAY KETHAN 1MV21EE020

Internal Guide

Mrs. D BEULA

Associate Professor

External Guide

Mr. Kumar N

Senior Assistant Horticulture Holalkere, Chitradurga



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) (Approved by AICTE New Delhi, Allinated to v 10, Delagavi, 150 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

# Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to be certified that the INTERNSHIP entitled "SUSTAINABLE FARMING" is carried out by the candidate K. UDAY KETHAN - 1MV21EE020, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.



# **JERTIFICATE**



This is to certify that,

# K. Uday kethan (1MV21EE020)

societal domain, from 26-10-2023 to 23-11-2023 in Krishi Vigyaan Kendra has successfully completed one-month short term Internship under the (Taluk Agriculture Office Holalkere, Chitradurga)

(taluk agriculture office Holalkere) GURUMURTHY.K.T Vice-president

> KUMAR.N - Comme

Senior-asstitant director of Horticulture

"Jnana Sangama", Belagavi-590 018



Internship Report On

#### "MACHINE LEARNING WITH PYTHON"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

KASA VANDANA

1MV21EE023

Under the Guidance of

Mrs. D. BEULA

Associate Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

#### Sir M. VISVESVARAVA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 18O 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru ~ 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "MACHINE LEARNING WITH PYTHON" is carried out by the candidate KASA VANDANA-IMV21EE023, from 27th October to 1st December who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the internship report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Signature

#### THE CERTIFICATE PROVIDED BY THE COMPANY



#### CERTIFICATE OF INTERNSHIP

This is to certify that Kasa Vandana whose USN is 1MV21EE023, has completed their Machine Learning with Python (Research Based) Internship organised and handled by Compsoft Technologies from 27th October, 2023 to 1st December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Chatbot for Healthcare System Using AI for UE Improvement Program, As part of the project, They designed the Machine Learning Model, Demonstrated and tested the working of the Model, Prepared a report highligting its flaws by understanding the design briefs and client Specifications that were provided in the Proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLECK HEART

ALZEU SIG pet film k flajajinagur

Bangalore . South

www.compsterlinleges.com was named or property to the second

This certificate was generated using CERTIFITATING

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "OVERVIEW OF EXPORT MANUFACTURING SBU"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by KHIVAN AVTAR 1MV21EE024

Under the Guidance of

Mrs. Beula D
Associate Professor



## Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

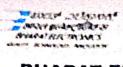
This is to certify that the INTERNSHIP entitled "OVERVIEW OF EXPORT MANUFACTURING SBU" is carried out by Mr. Khivan Avtar of USN 1MV21EE024, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, from 30 October 2023 to 29 November 2023 .lt is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal

Signature of HOD

2/8/m

### **CERTIFICATE ISSUED**





### BHARAT ELECTRONICS LIMITED

(A Govf. of India Enterprise, Ministry of Defence) Jalahalli Post, Bengaluru - 560 013, India

### CENTRE FOR LEARNING AND DEVELOPMENT Certificate

[[[[[[[[] [[[] [[] [[] [[] [[] [[] [[]
This is to certify that
Sri./Smt/Kum . KHIVAN . AYTAR
Ref No. 1410/CLD/HR/2023 - 24/27/1132
Student of . SIR. M. YESYESWARAYA . INSTITUTE OF
TECHNOLOGY - BANGALORE
carried out Project Work/Internship on
OVERVIEW OF EXPORT MANUFACTURING SOU
in EXPORT MANUFACTURENG.
SBU/CSG of BEL, Bengaluru from . 30TH OCT 2023
to. 29" Nov 2023
He/She was regular and punctual in his/her attendance
and his/her conduct was satisfactory during the period.
(2014년) : 1월 1일

Her Project / Internship Guide केमेल बर्बाणी शंगाल

Date: 29-11-2023 Place: Bengaluru

CAMELA HAVIMAIGNI THANGAL ST. No. BCZ 218463 TRIEG UGUR (E. R./ BUTGH E (UN)

### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



### Internship Report

on

### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by KRUTHIK GOWDA M 1MV21EE027

Under the Guidance of

Mrs. D.Beula
Associate Professor



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

2023-2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
Department of Electrical & Electronics Engineering



### CERTIFICATE

This is to certify that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT" is carried out by Mr.KRUTHIK GOWDA M of USN 1MV21EE027, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023- 2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

### CERTIFICATE ISSUED BY HARMONIZER INDIA PVT LTD



### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 19th Block, Marilingapps Extension, Bengaluru, Karnataka 560072

### CERTIFICATE OF INTERNSHIP

This is to Certify that, Kruthik Gowda M., 6th Semester - EEE at Sir M. Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd.

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt 11d

HARMONIZER INDIA PVT. LTO. 8 527, 1st Main. 18th Cross, RHCS Layout. Srigandhadakavalu, Hagarbhavi. RANGAI DM B-1

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Inana Sangama", Belagavi-390 018



# Internship Report

### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS **USING IOT"**

Submitted in partial fulfillment for the award of degree (211NT68)

Submitted by

### KRUTHIK KRISHNAMURTHY 1MV21EE028

Under the Guidance of

Dr. R Sivapriyan

Associate Professor



# Department of Electrical & Electronics Engineering

Sir M. VISVESV ARAYA INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru — 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "METHOD TO DETECT, **VIBRATION** AND **TEMPERATURE ANALYZE** MEASURE, TRANSFORMERS USING IOT" is carried out by the candidate KRUTHIK KRISHNAMURTHY- 1MV21EE028, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of
Internship Guide

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



Internship Report

on

### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS **USING IOT"**

Submitted in partial fulfillment for the award of degree (21INT68)

Submitted by

### KRUTHIK KRISHNAMURTHY 1MV21EE028

Under the Guidance of

Dr. R Sivapriyan

Associate Professor



Department of Electrical & Electronics Engineering

### Sir M. VISVESV ARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

2023-2024

SITY

IERS

LGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru — 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "METHOD TO DETECT, OF VIBRATION AND **TEMPERATURE** ANALYZE MEASURE, TRANSFORMERS USING IOT" is carried out by the candidate KRUTHIK KRISHNAMURTHY- 1MV21EE028, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internship Guide

# rtificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

ben Anternated und floor, such Block, Marilingappa Estension, Bengaloro, Karastaka 550072

### CERTIFICATE OF INTERNSHIP

This is to Certify that, Kruthik Krishnamurthy sath Semester - EF.E at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internality conducted by Harmonizer India Pri Ltd.

Topic: Melbod to detect, measure, analyze temperature and vibration of Transformers using DOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and ponerual in his/her strendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvi Ltd

HARMONIZER INDIA PYT. LTD. # 157, tat High, 15th Cross, FSYCS Layout

G. J.

Dr. Suresh H L

HOD-EES

Sir M Viewervarnya Institute of Technology

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Relagavi-590 018



### Internship Report on

# "NURTURING YOUNG MINDS: A RURAL EDUCATION INITIATIVE AT ANGANWADI"

Submitted in partial fulfilment of the requirements for the award of the Degree (21INT68)

Submitted by

KUSHAL G DIVAKAR USN: 1MV21EE029

Under the guidance of

Dr. R. Sivapriyan Associate Professor,



# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "NURTURING YOUNG MINDS: A RURAL EDUCATION INITIATIVE AT ANGANWADI" is carried out by the candidate KUSHAL G DIVAKAR—1MV21EE029, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of 06/08/ 20

Dr. R. Sivapriyan



### Anganwadi Kendra

Nelkunte, Bangalore North Taluk, Bengaluru Urban District

### INTERNSHIP COMPLETION CERTIFICATE

This is to certify that Kushai G Divakar the student of Sir M Visvesvaraya Institute of Technology bearing the USN 1MV21EE029 has successfully completed the INTERNSHIP entitled Societal related activities" at Anganwadi Kendra, from 25-10-23 to 24-11-23.

During this period, he was actively involved in assisting students with their learning activities. He demonstrated a high level of commitment, responsibility, and enthusiasm in performing his duties and contributed significantly to the educational development of the students.

Issuing Person's Name: このもに出い

Designation: Go. 51.637

Signature Signature II

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jawa Sangama", Belagavi-590 018



### Internship Report

### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

LAKSHMI K G 1MV21EE030

Under the Guidance of

Dr R SIVAPRIYAN

Associate Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

It is to certified that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT" is carried out by the candidate LAKSHMI K G -1MV21EE030, from 25th October to 24th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

PROF. & HEAD

DEPT. OF ELECTRICAL & ELECTRONICS ENGG. SIR M. VISYESVARAYA INSTITUTE OF TECHNOLOGY Krishnadevansyanagar, Hunasamaranahalii (Via) Yelshanks, Bengaksu - 582 157

### Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

ege, Anjeneila, und finer, sub ffiner, Iderfengappa Extension, Dengalera, Karrastaka (1600/12

### CERTIFICATE OF INTERNSHIP

This is to Certify that, Lakshmi K.G., with Semester - EEE at Sir M. Vievesvaraya Institute of Technology Bengaburu, has carried out the Internship conducted by Harmonker India Pvi Utd.

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using BOT

Internship Period: 25th October 2023 to 24th November 2023

He/Blue was regular and protected in his/her introduces and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO Manutainer fedia Pri Uni

HARMONIZER INDIA PVT. LTD. 1557, 1st Main. 55th Cross, RHCS Layout. Strandhadatastis, Maparthan. Or. Suresh H L

HIGHT- PEE

Sir M Vieres rays fresidute of Technology

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



### Internship Report

on

"Empowering Education through Entrepreneurial Innovation"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

M NISHANTH YADAV 1MV21EE032

Under the Guidance of

Dr.R. SIVAPRIYAN

Associate Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

Entrepreneurial Innovation" is carried out by the candidate M NISHANTHN YADAV -1MV21EE032, from 25th October 2023 to 23th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide VV

### Certificate issued by PRAKHARAH IIT & NEET ACADEMY LLP



www.prakharah.com (2) prakharah.edu@gmail.com (1) 9008008367, 9036920201

# Jay Complex, 1st floor, Ayyappaswamy Temple Road, Dasarahalli Main Road, Hebbal Kempapura, Bangalore-560024

# CERTIFICATE OF INTERNSHIP

This internship programme certificate is proudly awarded to

# Mr. M Mishanth Yadav

For him outstanding completion of the internship programme in ENTREPRENEURSHIP at this PRAKHARAH IIT & NEET ACADEMY LLP from 25th October to 23th November 2023.

Andel Kumarr

### VISVESVARAVA TECHNOLOGICAL UNIVERSITY

"Drawn Sangana", Jefagari-981 1119



### ELECTRICAL & ELECTRONICS ENGINEERING

### ENTERNSHIP REPORT

111

# "METEOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT"

Summitted in partial fulfillment for the award of degree (211NT6A)

Summitted ou

### LAKSHMIKANTH N G IMVZI EERS1

Under the Guidance of

De. R Sivaneivan

Associate Professor

Department of Electrical and Electronics Engineering, Sir M. VIII. Bengaluru



Department of Electrical & Electronics Engineering

### SO M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagroi, ISO 9001-2008 Certified)
Off Kempe Georgia International Airport Road, Krishnadevaraya Nagar,
Eengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Cenified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru — 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE. AND **ANALYZE TEMPERATURE** VIBRATION **OF** TRANSFORMERS USING IOT" is carried out by the candidate LAKSHMIKANTH N.G.- 1MV21EE031, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internship Guide

Signature of HOD

2/8/2

# Certificate issued by Harmonizer India PVT LTD



# HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

### CERTIFICATE OF INTERNSHIP

This is to Certify that, Lakshminkanth NG, 6th Semester - EFE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CIO

Happenion India Pri Isl

HARMONIZER INDIA FYT. LTD.
1 Str. 1st Main, 19th Coon, RECT Levil.
Strandshadekerske, Magazineri,
BANGALORE - Mc Off.

Dr. Suresh H L

HOD - EEE

Six M Viewesvaraya Institute of Technology

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama," Belagavi-590 018



# Internship Report On "METHOD TO DETECT, MEASURE, ANALYZE TEMPARATURE AND VIBRATION OF TRANSFORMERS USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

**MANOJ SC** 

**USN: 1MV21EE033** 

Under the Guidance of

Internal Guide
Dr Sivapriyan
Associate Professor
EEE Dept, Sir MVIT
Bengaluru

External guide
Mr Prashanth
Lead Manager
Harmonizer India Private Ltd
Sunkadakatte, Bengaluru



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, Accredited by NAAC and NBA)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyze the temperature and vibration of transformers using IIOT" is carried out by the candidate MANOJ.S.C(1MV21EE033), from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide



### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

### CERTIFICATE OF INTERNSHIP

This is to Certify that, Manoi S.C., 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

→ M M.R.Srinivas

сто

Harmonizer India Pvl 11d

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 15th Cross, RHCS Layout, Scigandhadakaya's Managara

### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



# Internship Report on

"FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by
MD RIZWAN KHAN P
1MV21EE034

Under the Guidance of

Dr. R Sivapriyan Associate Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. RIZWAN KHAN P of USN 1MV21EE034, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide 02/08/24

### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



### CERTIFICATE OF INTERNSHIP

This is to certify that Md Rizwan Khan P whose USN is 1MV21EE034, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Interactive Music Playlist Generator Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLICK HERE







www.varconstech.com contact@varconstech.com

This certificate was generated using CERTIEFY COM

### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Belagavi-590 018



### **Internship Report**

on

### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by MIKET KUMAR 1MV21EE035

Under the Guidance of

Mrs. P. SUMALATHA
Assistant Professor



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

2023-2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157 Department of Electrical & Electronics Engineering



### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Miket Kumar of USN 1MV21EE035, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

14/2014

Signature of Internal Guide

### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



### CERTIFICATE OF INTERNSHIP

This is to certify that Miket Kumar whose USN is 1MV21EE035, has completed their Full Stack Web Development Internship organized and handled by Varcons Technologies Pvt. Ltd from 27th October 2023 to 1st December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Interactive Music Playlist Generator Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLICK HERE or scan.

Spends to the control of the con

### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



### Internship Report on

011

"FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by
MOHAMMED TAWAKKAL
1MV21EE037

Under the Guidance of

Mrs. P SUMALATHA Assistant Professor



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

2023-2024

(Affiliated to VTU, Belagavi, Approved by AECTE, New Delbi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157
Department of Electrical & Electronics Engineering



### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr.MOHAMMED TAWAKKAL PASHA of USN 1MV21EE037, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES

Varcons Technologies Pvt Ltd Communicate Collaborate Create

# CERTIFICATE OF INTERNSHIP

This is to certify that Mohammed Tawakkal Pasha whose USN is 1MV21EE0: has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled **Template for Virtual Interior Design showcase Site**. This project was aimed at creating fully-fledged functional **web template(s)** for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

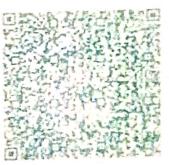
To verify this certificate,



This certificate was generated using

Spentilia A Spenti

r-560001



contact @varconstech com

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Belagavi-590 018



Internship Report

### "SUSTAINABLE FARMING"

Submitted in partial fulfilment for the award of degree (21LNT68)

Submitted by NAMRATHA S B 1MV21EE038

Under the Guidance of

Mrs. P Sumalatha
Assitant Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by ARCTE New Delhi, Affiliated to VTU, Befagesi, ISO 9000-2008 Certified)
Off Kempegowda International Airport Road, Krishmadevarzya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to be certified that the INTERNSHIP entitled "SUSTAINABLE FARMING" is carried out by the candidate NAMRATHA S B - 1MV21EE038, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during her Bachelor of Engineering degree from the Vivesvaraya academic requirement during her Bachelor of Engineering and suggestions indicated for Technological University, Belagavi. It is certified that all corrections and suggestions indicated for Internal assessment have been duly incorporated in the report and deposited in the department internal assessment have been duly incorporated as it satisfies the academic requirements in library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

### THE CERTIFICATE PROVIDED BY THE COMPANY



# CERTIFICATE



This is to certify that,

# Namratha.S.B (1MV21EE038)

societal domain, from 26-10-2023 to 23-11-2023 in Krishi Vigyaan Kendra has successfully completed one-month short term Internship under the (Taluk Agriculture Office Holalkere, Chitradurga)

GURUMURTHY.K.T
Vice-president
(taluk agriculture office Holalkere)

KUMAR.N
Senior-asstitant director
of Horticulture

### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



# Internship Report on "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by NISCHITH RAJ L C 1MV21EE039

Under the Guidance of

Mrs. P SUMALATHA Assistant Professor



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

#### SICM. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VIII, Belagavi, Approved by AICTE, New Delhi, Accordised by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 502157
Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Nitchith Raj L C of USN 1MV21EE039, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



#### CERTIFICATE OF INTERNSHIP

This is in certify that Nischith Raj L C whose USN is 1MV21EE039, has completed their Full Stack Web Development Internship organised and hamlied by Varcons Technologies Pyt. Ltd from 27th October, 2023 to 1st December, 2023.

The person to whom this critificate is addressed to has worked on a project titled Template for Virtual Interior Design showcase Site. This project was almost at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-marivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate.





Sans Per Lan

and der dearmante being

parameter statut

This excellence was gravated using a country of the

#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangama," Belagavi-590 018

Internship Report

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPARATURE AND VIBRATION OF TRANSFORMERS USING IOT"

submitted in partial fulfilment of the requirements for the award of the degree of

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

PRANATHI S **USN: 1MV21EE040** 

Under the Guidance of

Internal Guide Ms Sumalatha P Assistant Professor EEE Dept, Sir MVIT Bengaluru

External guide Mr Prashanth Lead Manager Harmonizer India Private Ltd Sunkadakatte, Bengaluru



Department of Electrical & Electronics Engineering

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



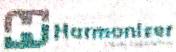
#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate PRANATHI.S -1MV21EE040, from 25th October to 24th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of HOD

Signature of Guide

# Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PYTATE

tions, dispersance, and there, early known that Phinging or Expensions, Busingshides, Karanische communic

# CERTIFICATE OF INTERNSHIP

Thus is to County that. Pranathis ash homeoster - Fiff at the M transportation from the properties of Tachmakany Baropaters have specified and the Interpolate transferred by Maconadous Statis by 134

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He thise was regular and punctual in his/her attractance and his/hes randoct were ratiofactory during the period

M.R.Srinivas

CID

Harmonner India Pri Lid

HARMONIZER INDIA PVT, LTD. # SIT, 1st Main, 18th Cores, SNCS Layers, finigandhodekayaha, Magarbhayi, BANDALORE - 650 091. 3----

Dr. Suresh H L

ROD - LIEE

Siz M Visconaraya lastinga el

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



# Internship Report

on

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

PRIYANKA.T 1MV21EE041

Under the Guidance of

Mrs. P. Sumalatha Assistant Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using HOT" is carried out by the candidate PRIYANKA .T -1MV21EE041, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

# Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

202, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Rengaluru, Karnataka 560072

# CERTIFICATE OF INTERNSHIP

This is to Certify that. Privanka T . 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pet Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

Harmonizer India Pvt Ltd

HOD-EEE

Dr. Suresh H L

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. 857, 1st Male, 15th Cross, RHCS Layout, conductive sin Hazerbank,

# VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Inana Sangama", Belagavi-590 018



Internship Report on "ROBOTICS"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by RAKSHITA MAHESH KANTHI IMV21EE042

Under the Guidence of

Mrs. P. SUMALATHA
Assistant Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempagawda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

2023-2024

.57

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### **CERTIFICATE**

It is to certified that the INTERNSHIP entitled "ROBOTICS" is carried out by the candidate RAKSHITA MAHESH KANTHI - 1MV21EE042, from 25th October 2023 to 30th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

# CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES





# **CERTIFICATE OF COMPLETION**

We hereby certify that

# Rakshita Mahesh Kanthi

From Electrical & Electronics Engineering with USN IMV21EE042 from the Sir. M. Visvesvaraya Institute Of Technology, has successfully completed the Robotics Internship held at comedkares innovation Hub, Yelahanka, Bengaluru from 25th October 2023 to 30th November 2023. We at Comedkares Innovation Hub, appreciate your participation and effort in the internship and wish you the best in your future endeavours.

Dr. S. Kumar

Executive Secretary - Comedkares

30th November 2023



#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Inana Sangama", Belagavi-590 018



#### Internship Report

on

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

RAVITEJA 1MV21EE043

Under the Guidance of

Mrs. Rekha Radhakrishnan Assistant Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate RAVITEJA -1MV21EE043, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

# Certificate issued by Harmonizer India PVT LTD



# HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

# CERTIFICATE OF INTERNSHIP

This is to Certify that, Raviteja G, 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pyt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt I.Id

\*ARMONIZER INDIA PVT. LTD. 557, 1st Main, 15th Cross, RHCS Layout, Srigandhadakayalu, Nagarbhavi, BANGALORE - 580 091. B-\$-

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

1MURIEEO LIY

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Belagavi-590 018



# ELECTRICAL & ELECTRONICS ENGINEERING

# INTERNSHIP DIARY

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS **USING IOT"**

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by **ROHIT** 1MV21EE044

Under the Guidance of

#### Mrs.Rekha Radhakrishnan

Assistant Professor Department of Electrical and Electronics Engineering, Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

#### SigM. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate ROHIT -1MV21EE044, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internshipreport has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

#### Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

202, Anjanadri, and floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, Rohit 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CIO

Harmonizer India Pvi Lid

HARMONIZER INDIA PVT, LTD.

557, 1st Main, 15th Cross, RHC0 Layout,
Srigandhadataron, Maganthad,

8-4-

Dr. Suresh H L

HOD-EEE

Sir M Visvesvaraya Institute of Technology

#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by
SELVA KANNAN K
1MV21EE046

Under the Guidance of

Mrs. REKHA RADHAKRISHNAN

**Assistant Professor** 



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

# SILM, VISVESVARAVA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by MAAC and MRA)
Off Kempegowda International Airport Road, Krishnadevaraya Magar, Bengalan - 562157
Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT" is carried out by Mr. Selva kannan k of USN 1MV21EE046, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 25th October to 23st November. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

### CERTIFICATE ISSUED BY HARMONIZER INDIA PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

# CERTIFICATE OF INTERNSHIP

This is to Certify that, **Selva Kannan K**, 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. 5 557, 1st Main, 18th Gross, RHC8 Layout, Brigandhadakavalu, Nagarbhavi,

#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Belagayt-590 018



#### Internship Report

on

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by SHARAN R 1MV21EE047

Under the Guidance of

#### Mrs. REKHA RADHAKRISHNAN

Assistant Professor



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
Department of Electrical & Electronics Engineering



#### **CERTIFICATE**

This is to certify that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT" is carried out by Mr.Sharan R of USN 1MV21EE047, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

# CERTIFICATE ISSUED BY HARMONIZER INDIA PVT LTD



#### HARMONIZER INDIA PVT LTD

202, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengalum, Kamataka 550072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, **Sharan R**, 6th Semester - EEE at Sir M Visvessearaya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd.

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 15th Cross, RHCS Leyout, Sogandhadakavalu, Nagarbhavi, BANGALORE - #60-101

Dr. Suresh H L

HOD-EEE

Sir M Vinvesvaraya Institute of Technology

#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jana Sangama", Belagavi-\$90 018



#### Internship Diary

Off

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (211NT68)

Submitted by SHIBAJEET MUKHERJEE IMV21EE048

Under the Guidance of

#### Mrs. REKHA RADHAKRISHNAN

Assistant Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru ~562157

# SIT M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Hagar, Bengaluru - 562157 Department of Electrical & Electronics Engineering



#### CERTIFICATE

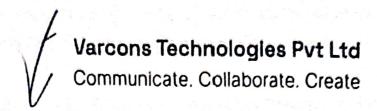
This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Shibajeet Mukherjee of USN 1MV21EE048, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October 2023 to 1st December 2023. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

Signature of HOD

02/08/24

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



#### CERTIFICATE OF INTERNSHIP

This is to certify that Shibajeet Mukherjee whose USN is 1MV21EE048, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Interactive Music Playlist Generator Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLICK HERE







motaci Grancosterb.com

This certificate was generated using Chillie's Calif

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Belagavi-590 018



Internship Report

# "NURTURING YOUNG MINDS: A RURAL EDUCATION INITIATIVE AT ANGANWADI"

Submitted in partial fulfilment of the requirements for the award of the Degree (21INT68)

Submitted by

SHIVAM KUMAR USN: 1MV21EE049

Under the guidance of

Mrs. Rekha Radhakrishnan Assistant Professor,



# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



# **CERTIFICATE**

It is to certified that the INTERNSHIP entitled "NURTURING YOUNG MINDS: A RURAL EDUCATION INITIATIVE AT ANGANWADI" is carried out by the candidate SHIVAM KUMAR - 1MV21EE049, from 25th October 2023 to 24th November 2023, who is a bonfide student of 3rd Year at Sir M Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi.It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Mrs. Rekha Radhakrishnan

Signature of HOD

Dr. Suresh H.L.



#### Anganwadi Kendra

Nelkunte , Bangalore North Taluk , Bengaluru Urban District

#### INTERNSHIP COMPLETION CERTIFICATE

This is to certify that SHIVAM KUMAR, the student of Sir M Visvesvaraya Institute of Technology bearing the USN 1MV21EE049 has successfully completed the INTERNSHIP entitled Societal related activities at Anganwadi Kendra, from 25-10-23 to 24-11-23.

During this period, he was actively involved in assisting students with their learning activities. He demonstrated a high level of commitment, responsibility, and enthusiasm in performing his duties and contributed significantly to the educational development of the students.

Issuing Person's Name: 」というだいし Designation: ちゅうしょうな

Signature

H. Koclala . M. Common II



#### VISEVESVARAVA TECHNOLOGICAL UNIVERSITY

"Trans Sameral" Brings & SW 118



#### interesting Report

191

#### "MACHINE LEARNING WITH PYTHOW"

Submitted in partial fulfillment for the award of the degree CHATISS

Shimited by Shivan Pander INVERSE

Trule be fauteurent

MITS. REKELA RADEARRICAN

Assistant Professor



Department of Electrical & Electronics Engineering

#### SI M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VIII. Beingary, Agentsending All. II. New Locks, Accommon West, and West, and West, Childreng Wash, Accommon Agent, Accommon Accommo

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru ~ 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "MACHINE LEARNING WITH PYTHON" is carried out by Mr. Shivam Pandey of USN 1MV21EE050, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1th December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



### **CERTIFICATE OF INTERNSHIP**

This is to certify that Shivam Pandey whose USN is 1MV21EE050, has completed their Machine Learning With Python (Research Based) Internship organised and handled by Varcons Technologies Pvt. Ltd from 27th October, 2023 to 1st December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Social Media Sentiment Analysis. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLICK HERE

LOGIES PVT. LTD

nv-560001

www.varcrinstech.com

This certificate was generated using CERTIUFY COM

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



Internship Report on

# "SOCIETAL RELATED ACTIVITIES"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

SHIVARAJ N 1MV21EE051

Under the Guidance of

# Mr. KUMARASWAMY R

Assistant Professor



Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

#### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is certified that the INTERNSHIP entitled "societal related activities" is carried out by the candidate, 1MV21EE051-SHIVARAJ N, from 25<sup>th</sup> October 2023 to 22th November 2023, who is a bonfide student of 6TH semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the Credits for the academic term 2023- 2024, as part of the academic requirement during his / her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for Internal Assessment have been duly incorporated in the report and deposited in the department library. The Internship has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the course of Bachelor of Engineering in Electricals and electronics.

Signature Guide

### THE CERTIFICATE PROVIDED BY THE COMPANY

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevaraya Nagar, International Airport Road, Hunasmaranahalli, Bengaluru - 562157

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



#### CERTIFICATE

It is certified that the INTERNSHIP entitled "Societal Related Activities" is carried out by the candidate IMV21EE051- SHIVARAJ N, from 25-10-2023 to 23-11-2023, who is a bonafide student of 5° semester at Sir M Visvesvaraya Institute of Technology, towards fulfillment of the award of the Credits for the academic term 2021- 2025, as part of the academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi.

The Internship has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the course of Bachelor of Engineering in Electrical And Electronics.

न्य गुण्डिक ग्रीत दुर्गान्तिक स्मित्री एक पुरुष्टिक स्मित्री स्मित्री स्मित्री इंदर्गान्तिक स्मित्री स्मित्री

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



## Internship Report

on

## "SOCIETAL RELATED ACTIVITIES"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

### SHREE HARIPRASAD NAYAK 1MV21EE052

Under the Guidance of

## Mr. KUMARASWAMY R

Assistant Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

## SWM. VISUESUARAVA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 190 0001-2008 Centified)
Off Kenye Cowda International Airport Road, Krishnadevaraya Nagar,
Dengaluru = 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the Internship entitled "SOCIETAL RELATED ACTIVITIES" is curried out by the candidate SHREE HARIPRASAD NAVAK «IMV21EE052, from 25th Oxioser 2023 to 24th November 2023 who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during her Dachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

#### THE CERTIFICATE PROVIDED BY THE COMPANY

## SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Krishnadevaraya Nagar, International Airport Road, Hunasmaranaballi, Bengalum - 562157

## DEPARTMENT OF ELECTRICAL AND FLECTRONICS ENGINEERING



#### CERTIFICATE

It is certified that the INTERNSHIP entitled "Societal Related Activities" is carried out by the candidate IMV21EE052-SHREE HARIPRASAD NAYAK, from 25-10-2023 to 23-11-2023, who is a bonafide student of 5th semester at Sir M Visvesvaraya Institute of Technology, towards fulfillment of the award of the Credits for the academic term 2021- 2025, as part of the academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi.

The Internship has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the course of Bachelor of Engineering in Electrical And Electronics.

Name & Signature of Internship Guide/Mentor Field Assistant MARS, RAICHUS

#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "SOCIETAL RELATED ACTIVITIES"

submitted in partial fulfillment of the requirements for the award of the Degree of(21INT68)

# BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

SHREYAS T GOWDA USN:1MV21EE053

Under the Guidance of

Internal Guide
Mr.KUMARASWAMY R

Assistant Professor, Electrical & Electronics Engineering, External Guide

Mr. UMESH

PDO,grama panchayat
Aremellanahalli, Turvekere,Tumkur.



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157 2023–2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is certified that the INTERNSHIP entitled "societal related activities" is carried out by the candidate,1MV21EE053-SHREYAS .T. GOWDA, from 25th October 2023to 22th November 2023, who is a bonfide student of 6TH semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the Credits for the academic term 2023 - 2024, as part of the academic requirement during his / her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for Internal Assessment have been duly incorporated in the report and deposited in the department library. The Internship has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the course of Bachelor of Engineering in Electricals and electronics.

Signature, Guide

07

Signature of HOD

2/8/24



# GRAMA PANCHAYAT AREMALLENAHALLI TURUVEKERE TALLUK TUMKUR DISTICT

Pincode-972224

Date 7-6-2024

#### CERTIFICATE OF INTERNSHIP

It is certified that the internship entitled 'Societal Related Activities is carried out bythe candidate 1MV21EE053-SHREYAS T GOWDA, from 25-10-2023 to 22-11-2023, who is a bonafide student of 5<sup>th</sup> semester at sir M Vishveshvaraya. Institute of Technology , towards fulfillment of the award of the credits for the academic term 2021-2025, as part of the academic requirement during his Bachelor of engineering degree from the vishveshwaraya Technology University, Belagavi.

The internship has been approved as it satisfied the academic requirements inrespect of intership work prescribed for the course of engineering in electricals and electronics.

ಪಂಚಾಯತಿ ಅಧಿವೃದ್ಧಿ ಅಧಿಕಾರಿ ಸ್ರಾಮ ಪಂಚಾಯತಿ ಆರೇಮಲ್ಲೇನಹಳ್ಳಿ.

್ತತುರುವೇಕೆರೆ ಶಾಲ್ದೂಕು

## VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



## Internship Report

on

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by SPARSH KUMAR 1MV21EE054

Under the Guidance of

Mr. Kumara Swamy R
Assistant Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru --562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Sparsh Kumar of USN 1MV21EE054, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



## CERTIFICATE OF INTERNSHIP

This is to certify that Sparsh Kumar whose USN is 1MV21EE054, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled **Template for Interactive Music Playlist Generator Site**. This project was aimed at creating fully-fledged functional web **template(s)** for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, Click Horse or a



traspect front compact by seven

This certificate was appointed and

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Juana Sangama", Belagavi-590 018



#### Internship Report On

## "MACHINE LEARNING WITH PYTHON"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

**SPOORTHI M** 

1MV21EE055

Under the Guidance of

Mr. Kumara Swamy Assistant Professor



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru -562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "MACHINE LEARNING WITH PYTHON" is carried out by the candidate SPOORTHI M-IMV21EE055, from 27th October to 1st December who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the internship report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

#### THE CERTIFICATE PROVIDED BY THE COMPANY



## CERTIFICATE OF INTERNSHIP

This is to certify that Spoorthi M whose USN is 1MV21EE055, has completed their Machine Learning with Python (Research Based) Internship organised and handled by Compsoft Technologies from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Chatbot for Healthcare System Using AI for UE Improvement Program, As part of the project, They designed the Machine Learning Model. Demonstrated and tested the working of the Model, Prepared a report highligting its flaws by understanding the design briefs and client Specifications that were provided in the Proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.





we was appeter unbegine com services (competer unbegine) com

#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Inana Sangama", Belagavi-590 018



# Internship Report on "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (211NT68)

Submitted by
SULAIM AHMED NAVEED
IMV21EE057

Under the Guidance of

Mr. KUMARA SWAMY R
Assistant Professor



## Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157
Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. SULAIM AHMED NAVEED of USN 1MV21EE057, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



### CERTIFICATE OF INTERNSHIP

This is to certify that Sulaim Ahmed whose USN is 1MV21EE057, has securived their Pull Stack Web Development Interesting regarded and long-shed by Varcona Technologies Pvt. Ltd from 27th October, 2023 to 1st December, 2023

The present a whom this certificate is addressed to has worked on a projecttabled Template for Interactive Music Playlist Generator Site. This project was almost at creating fully fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and effect specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-medianted attitude to learning new things. Their performance exceeded respectations and was able to complete the project successfully on time.



#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



**Internship Report** 

on

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by THRISHA R 1MV21EE060

Under the Guidance of

Mrs. BINDIYA TYAGI

Assistant Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Ms.Thrisha R of USN 1MV21EE060, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES

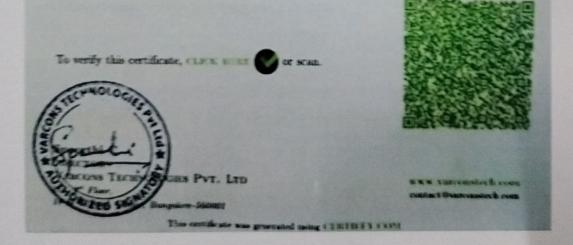
# Varcons Technologies Pvt Ltd Communicate. Collaborate. Create

## CERTIFICATE OF INTERNSHIP

This is to certain that Thrisha R whose USN is 1MV21EE060, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Interactive Resume Generator Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.



## VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



Internship Report

on

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by VIHAN C SINGE 1MV21EE063

Under the Guidance of

Mrs. BINDIYA TYAGI

Assistant Professor



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering

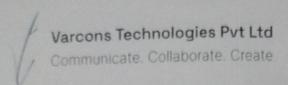


#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Vihan C Singe of USN 1MV21EE063, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

## CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



## CERTIFICATE OF INTERNSHIP

This is to certify that Vihan C Singe whose USN is 1MV21EE063, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Virtual Interior Design showcase Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate, CLECK HERE OF SC



were there ensured come

This certificate was generated using CERTIEFY COM

#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



Internship Report

OT

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by VAIBHAV S 1MV21EE062

Under the Guidance of

Mrs. BINDYA TYAGI
Assistant Professor



# Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering

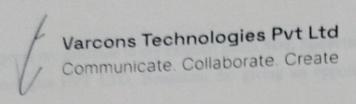


#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Vaibhav S of USN 1MV21EE062, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

## CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



## CERTIFICATE OF INTERNSHIP

This is to certify that Vaibhav S whose USN is 1MV21EE062, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Interactive Music Playlist Generator Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate. The state of scan.

Specific of the state of the state

#### VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by UZMA ALMAS 1MV21EE061

Under the Guidance of

Mrs. BINDIYA TYAGI

Assistant Professor



## Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Ms. UZMA ALMAS of USN 1MV21EE061, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27th October to 1st December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internal Guide

#### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES



#### CERTIFICATE OF INTERNSHIP

This is to certify that Uzma Almas whose USN is 1MV21EE061, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pvt. Ltd from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Template for Virtual Interior Design showcase Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.







www.varcoustech.com

This certificate was generated using CERTIEFY COM

## VISVESVARAVA TECHNOLOGICAL UNIVERSITY

"Irona Sangama" Bringert. 70 HS



#### ELECTRICAL & ELECTRONICS ENGINEERING

Internship Report

110

# "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT"

Submitted in partial fulfilment for the award of teores IIIV 160

Submitted by

Tejas Monrya L V

1.MEV 21 E E 1159

Under the Guidance of

Mirs. Bindiva Tyagi

Assistant Phofessor

Department of Electrical and Electronics
Engineering, Sir M. VIT, Bengalum.



Department of Electrical & Electronics Engineering

## Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

Off Kempe Gowda International Airport Road, Krishnadewitaya Nagar,
Bengalura - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001;2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

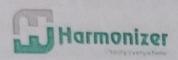
#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING IOT" is carried out by the candidate Tejas Mourya L. V. - 1MV21EE059, from 25th October to 24" November who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

#### Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

## CERTIFICATE OF INTERNSHIP

This is to Certify that, **Tejas Mourya L V**, 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

11ARMONIZER INDIA PVT. LTD. 557, 1st Main, 15th Cross, RHCS Layout, Srigandhadakavalu, Nagarbhavi, BANGALORE - 560 091. B------

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

## NESSY SERVES OF A PECTEN OF ORDER ALL UNIVERSITY

"bear Concess" Robert W. 118



#### Intership Report

THE

#### "FULL STACK WER DEVELOPMENT"

Successive to married telefoliment for the award of the algorith 2017 168

Submitted by SUMITH BABUS UNIVERSE

Under the Candance of

MR KIMARASWAMY R

Assistant Professor



Department of Electrical & Electronics Engineering

### SIT M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to WT). Belagavi, Approved by AATE, New Delhi, Accredited by NAAC and NBA)
(If Kennegowie International Airport Road, Krishnadevarive Nagar, Bengalure - NASS)

## VISEVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



#### **Internship Report**

on

### "FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by SUMITH BABU S 1MV21EE058

Under the Guidance of

MR. KUMARASWAMY R

**Assistant Professor** 



Department of Electrical & Electronics Engineering
Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by Mr. Sumith Babu S of USN 1MV21EE058, a bonafide student of Sir M. Visvesvaraya Institute of Technology, in partial fulfillment for the award of Bachelor of Engineering, in Electrical & Electronics under Visvesvaraya Technological University, Belagavi, during the year 2023-2024 from 27<sup>th</sup> October to 1<sup>st</sup> December. It is certified that all corrections/suggestions indicated have been incorporated in the report. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

2 01. E/. 0/8/24

Signature of Internal Guide

## CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES





Date: 25th October, 2023

Name: Sumith Babu.S USN: 1MV21EE058

Placement ID: 2310FSWDBONE

#### Dear Student.

We would like to congratulate you on being selected for the Full Stack Web Devlopment Internship position with Varcons Technologies, effective Start Date 25<sup>th</sup> October, 2023, All of us are excited about this opportunity provided to you!

This internship is viewed as being an educational opportunity for you, rather than a part-time job. As such, your internship will include training/orientation and focus primarily on learning and developing new skills and gaining a deeper understanding of concepts of Full Stack Web Devlopment through hands-on application of the knowledge you learn while you train with the senior developers. You will be bound to follow the rules and regulations of the company during your internship duration.

Again, congratulations and we look forward to working with you!.

Sincerely,

Spoorthi H C

Director

VARCONS TECHNOLOGIES

213, 2<sup>st</sup> Floor, 18 M G Road, Ulsoor,
Bangalore-560001

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-590 018



Internship Report on

## "INDUSTRIAL AUTOMATION"

submitted in partial fulfilment of the requirements for the award of the Degree of

Submitted by

ADARSH M BALLARY USN: IMV22EE400

Under the guidance of

Mrs. Bindiya Tyagi Assistant Professor,



# DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 – 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering



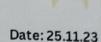
#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "INDUSTRIAL AUTOMATION" is carried out by the candidate ADARSH M BALLARY - 1MV22EE400, from 30th October 2023 to 25th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide



### CERTIFICATE OF APPRECIATION



This is to certify that Mr.Adarsh M Ballary bearing USN:1MV22EE400 a student of Sir M. Visvesvaraya Institute of Technology, Bangalore has successfully completed 4 weeks internship in the field of "Industrial Automation" from 30 October 2023 to 25 November 2023

During his internship period, demonstrated exceptional dedication, enthusiasm, and a strong commitment to learning and contributing to our organization. Their valuable contributions and hard work were truly commendable.

We appreciate Mr.Adarsh M Ballary for his outstanding performance and dedication, which greatly benefited our team and organization as a whole. We wish him continued success in his future endeavors.

Bharath TS

MR. BHARATH TS

DIRECTOR
IROBO AUTOMATION PVT LTD
BENGALURU

iRobo

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

ANIL T D 1MV22EE401

Under the Guidance of

Mr.Bhaskar C Assistant Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate ANIL T D -1MV22EE401, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Cost robow He I

for corrector

#### Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, **Anil T D**, 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

cro

Harmonizer India Pvt Ltd

Dr. Suresh H L

8-4.

HOD - EEE

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 18th Cross, RHCS Layout, Srigendhadatavatu, Negarbhavi, BANGALORE - 560 091.

"Jnana Sangama", Belagavi-590 018



### Internship Report

TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT" "METHOD TO DETECT, MEASURE, ANALYZE

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

### BHARATH KUMAR B K 1MV22EE402

Under the Guidance of

Mr. BHASKAR .C **Assistant Professor** 



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using HOT" is carried out by the candidate BHARATH KUMAR B K -1MV22EE402, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfilment of the award of the credits for the academic term 20232024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Certificate issued by Harmonizer India PVT LTD



### CERTIFICATE OF INTERNSHIP

Extension, Bengaluru, Karnataka 560072

This is to Certify that. **Bharath Kumar B K**. 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt.Ltd

Topic: Method to detect, measure, analyze temperature and vibration of

Internship Period: 25th October 2023 to 24th November 2023 Transformers using HOT

He/She was regular and punctual in his/her attendance and his/her conduct was

satisfactory during the period



M.R.Srinivas

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 15th Coust, RNCS Layout, Srigandhadakavatu, Magarbhavi, BANGALORE - 660 091.

Dr. Suresh H L · 60 - 10-

HOD-EEE

Sir M Visvesvaraya Institute of Techn

"Jnana Sangama", Belagavi-590 018



### **ELECTRICAL & ELECTRONICS** ENGINEERING

Internship Report on

"INNOVATING ENGINEERING LEADERSHIP"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

**BHARATH R** 

1MV22EE403

Under the Guidance of

Mr.BHASKAR C

**Assistant Professor** 

Department of Electrical and Electronics Engineering Sir M. VIT, Bengaluru.



## Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY
(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 180 9001-2008 Centifod)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 502157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "INNOVATING ENGINEERING work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering internal assessment have been duly incorporated in the report and deposited in the department library of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya to 24th November who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of The internship has been approved as it satisfies the academic requirements in respect of internship Technological University, Belagavi. It is certified that all corrections and suggestions indicated for Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part LEADERSHIP" is carried out by the candidate BHARATH R- 1MV22EE403, from 25th October

Signature of Guide

(No + Sub; Hed for crocky)

Signature of HOD 2 8 M

#### THE CATIFICATE PROVIDED BY COMPANY



Congression Construction Sufficient

STARTCODE

TO CERTIFY THAT

Name: 'Bhauath . R.

College: Bu M Whushranya Institute of Technology Bangalow

USN NO: IMVAZEEHOS

Has successfully completed the internship program on "Innovative Engineering Leadership" with for a period of 30 days

REG ID: IEL/EC/SC/1013/14

C.NO:DIGB /IEL/EC/SC/1012/14

**Program Manager** 

Sajith

Granted on

25/11/2023

Program Coach

ASrichar

2nd Floor, Aditi Rudra Arcade, No. 546/R, Vinayaka Layout, Nagarabhaavi-560072

www.digistacksoft.com

hr@disgistacksoft.com

"Jnana Sangama", Belagavi-590 018



#### **ELECTRICAL & ELECTRONICS ENGINEERING**

Internship Dairy
"FULL STACK WEB DEVELOPMENT"

Submitted in partial fulfillment for the award of the degree (21INT68)

Submitted by BHAVANA.T.S. 1MV22EE404

Under the Guidance of

Mr. BHASKAR.C

Assistant Professor

Dept Electrical & Electronics Engineering.

Sir M. VIT, Bengaluru.



Department of Electrical & Electronics Engineering

#### Sir M. VISVESVARAYA INSTITUTE OFTECHNOLOGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengalur-562157

2023-2024

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

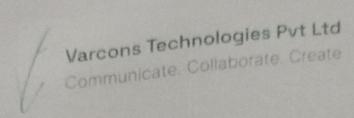
It is to certified that the INTERNSHIP entitled "FULL STACK WEB DEVELOPMENT" is carried out by the candidate BHAVANA.T.S of USN 1MV22EE404, from 25<sup>th</sup> October 2023 to 24<sup>th</sup> to November 2023 who is a bonafide student of 6<sup>th</sup> semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Paid?

(pot submitted

for Ormachon)

### CERTIFICATE ISSUED BY VARCONS TECHNOLOGIES PVT LTD



### CERTIFICATE OF INTERNSHIP

This is to certify that BHAVANA T.S whose USN is 1MV22EE404, has completed their Full Stack Web Development Internship organised and handled by Varcons Technologies Pyt. Ltd from 27th October, 2023 to 1st

The person to whom this certificate is addressed to has worked on a project titled Template for Virtual Interior Design Showcase Site. This project was aimed at creating fully-fledged functional web template(s) for a client of ours. As part of the project, they designed functional web pages, used databases to collect, store, and sort data, by understanding the design briefs and client specifications that were provided in the project proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.

To verify this certificate,

NOLOGIES PVT. LTD 18 M S Road, Ulsoor, Sangalore, \$60001

contact@varconstech com

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

BHUVANESHAWRI.M. 1MV22EE405

Under the Guidance of

Mr. Bhaskar .C. Assistant Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering

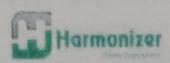


#### CERTIFICATE

the temperature and vibration of transformers using HOT" is carried out by the candidate BHUVANESHWARI.M. -1MV22EE405, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfilment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Grid 8/24

#### Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, Bhuvaneshwari M , 6th Semester - EEE at Sir M Viscesvaraya Institute of Technology Bengahiru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

Harmonizer Indsa Pvt Ltd

HARMONIZER INDIA PVT. LTD. "57, 181 Main, 15th Cross, RHCS Layout. Srigandhadakavalu, Na tarbhavi,

Dr. Suresh H L

Sir M Visvesvaraya Institute of Technology

"Jnana Sangama", Belagavi-590 018



#### ELECTRICAL & ELECTRONICS ENGINEERING

Internship Report

on

#### "MACHINE LEARNING USING PYTHON"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

CHAITRA R S 1MV22EE406

Under the Guidance of

Mr. BHASKAR C

Assistant Professor

Department of Electrical and Electronics Engineering

Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

This is to certify that the Internship entitled "Machine Learning with Python" is carried out by the CHAITRA R S, USN: 1MV22EE406, from 27<sup>th</sup> October to 1<sup>st</sup> December who is a bonafide student of 6<sup>th</sup> semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment for the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Childen



#### CERTIFICATE OF INTERNSHIP

This is to certify that Chaitra R Shirahatti whose USN is 1MV22EE406, has completed their Machine Learning with Python (Research Based) Internship organised and handled by Compsoft Technologies from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Voice classification using ML. As part of the project, They designed the Machine Learning Model, Demonstrated and tested the working of the Model. Machine Learning its flaws by understanding the design briefs and Prepared a report highligting its flaws by understanding the design briefs and client Specifications that were provided in the Proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.





services decompstee hoologues, com

This certificate was generated using CERTILEY COM

"Jnana Sangama", Belagavi-590 018



#### Internship Report

OF

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

CHANNABASAVA G 1MV22EE407

Under the Guidance of

Mr. BHASKAR C Assistant Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

#### Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate CHANNABASAVA G -1MV22EE407, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

(not subnitted

rection)

Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, Channabasava G . 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 15th Cross, RHCS Layout, Srigandhadakavalu, Nagarbhavi, BANGALORE - 560 091.

8-1-

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

"Jnana Sangama", Belagavi-590 018



#### Internship Report on

#### "SOCEITAL DEVELOPMENT"

submitted in partial fulfilment of the requirements for the award of the Degree of

Submitted by

DIVYA T.L. USN: IMV22EE408

Under the guidance of

Dr. Siddappaji M.R. Assistant Professor.



#### DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023 - 2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "SOCIETAL DEVELOPMENT" is carried out by the candidate DIVYA T.L. - 1MV22EE408, from 02th November 2023 to 30th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Internship Guide Dr. Siddappaji M.R.

#### United Way of Bengaluru

Comma Court L. S. Solthon, Secral Blanc Name Main Road.
MAL HE Stage. Respondent South 1838
193. 40 Art. Monta 1838. 401. Art. 1838 A feel
Emile suppose in beneather one
Mak in a un beneather one
Art. 4Att. 3013 Comment



Date - 12.12.2024

#### INTERNSHIP COMPLETION CERTIFICATION

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Divya TL, Student of Sir MV Vishweshvarayya Bengaluru, has completed the internship requirements at United Way of Bengaluru from 2<sup>nd</sup> Nov, 2023 to 30<sup>th</sup> Nov 2023.

During his time at United way of Bengaluru, Divya has assisted us in our "Born Learning campaign" and "ISDP" programs where she worked on the following tasks and supported the Education projects.

- Part of the Anganwadi worker ECCE training session that happened in Chikkaballpura for a period of two days
- Helped in the documentation of the education vertical with regards to making of progress reports, Inauguration reports.
- Visited beneficiaries in Anekal where UWBe has extended its support for the Divyang children.
   With a deep conversation with the beneficiaries about the support by UWBe
- Part of the preparation team for training center Inauguration in Chikkaballpura.
- visited the Anganwadi of Basavanagar to understand the working of the anganwadi and the community

We wish "Divya TL the best for his future endeavors.

Venkata Sudhakar Namaja

Vice President -Finance, HR Admin and CCO

United Way of Bengaluru

"Jnana Sangama", Belagavi-590 018



#### Internship Report

or

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

GAGAN.S. 1MV22EE409

Under the Guidance of

Dr. SIDDAPPAJI M R Assistant Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering

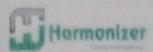


#### CERTIFICATE

the temperature and vibration of transformers using IIOT" is carried out by the candidate GAGAN.S. -1MV22EE409, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfilment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Mischart Signature of Guide

#### Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, **Gagan S**, 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Barmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

War and the same of the same o

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. 557, 1st Wain, 15th Cross, RHCS Layout, Snigendhedekavalu, Negarbhavi, BANCALORE - 550 091. B----

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

"Jnana Sangama", Belagavi-590 018



#### Internship Report

on

#### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

#### HANAMANT PUJARI 1MV22EE410

Under the Guidance of

#### DR. SIDDAPPAJI M.R.

Assistant Professor



#### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering



#### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate HANAMANT PUJARI -1MV22EE410, from 25th October to 24th November who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

#### Certificate issued by Harmonizer India PVT LTD



#### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Kamataka 560072

#### CERTIFICATE OF INTERNSHIP

This is to Certify that, Hanamant Pujari, 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

B. Sunsch H.

Dr. Suresh H L

HOD - EEE

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 15th Cross, RHCS Layout, Srigandhadakavalu, Nagarbhavi, BANGALORE - 580 091.

"Jnana Sangama", Belagavi-590 018



## ELECTRICAL & ELECTRONICS ENGINEERING

INTERNSHIP REPORT

## "SOCIETAL ACTIVITY ON SERICULTURE"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

USN-1MV22EE411 HARISH DB

Under the Guidance of

Dr. Siddappaji M.R Associate Professor



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001.2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

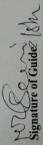
Bengaluru - 562157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

SERICULTURE" is carried out by the candidate HARISH D B -1MV22EE411, from 26th October to 23th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.





#### CERTIFICATE



This is to certify that,

#### Harish D. B (1MV22EE411)

has successfully completed one-month short term Internship under the societal domain, from 26-10-2023 to 23-11-2023 in Taluk Sericultur office, Bagepalli.

Chinnakaivaramayya Assistant Director Sericulture Bagepalli division, Bagepalli A.N.Suresh babu
Sericulture demonstrator
Bagepalli

"Juana Sangama", Belagavi-590 018



## ELECTRICAL & ELECTRONICS ENGINEERING

Internship Dairy on

### AND VIBRATION OF TRANSFORMERS USING IOT" "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

USN:-1MV22EE412 HARSHA G J

Under the Guidance of

Dr. SIDDAPPAJI M.R Assistant Professor Department of Electrical and Electronics Engineering, Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

# Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "METHOD TO DETECT, MEASURE, ANALYZE TEMPARATURE AND VIBRATION OF TRANSFORMERS USING IOT" is carried out by the candidate HARSHA G J - 1MV22EE412, from 25th October 2023 to 24th November 2023, who is a bonfide student of 3rd Year at Sir M Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/ Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi.

It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library.

The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

HSIETAKONE KZERI (DE DIA PVT. LTD. # 557, 1st Maln, 15th Cross, RHCS Layout, Derigiadappisitis M.R.Nagarbhavi, BANGALORE - 560 091.

Signature of HOD

Dr. Suresh HL

"Jnana Sangama", Belagavi-590 018



Internship Dairy

On

# "MACHINE LEARNING WITH PYTHON"

Submitted in partial fulfillment for the award of degree (21INT68)

Submitted by

HARSHAKUMAR B

USN: 1MV22EE413

Under the Guidance of

DR. SIDDAPPAJI M.R

Assistant Professor



## Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF

### TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru

2023-2024

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

This is to certified that the Internship entitled "Machine Learning with Python" is carried out by the HARSHAKUMAR B, USN: IMV22EE413, from 27th October to 1st December who is a bonafide student of 6th semester at Sir M. Visvesvaraya Institute of Technology, towards is a bonafide student of 6th credits for the academic term 2023-2024, as a part of academic fulfillment for the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University Belagavi. It is certified that all corrections and suggestions indicated for internal university Belagavi. It is certified that all corrections and deposited in the department library. assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of The internship work prescribed for the course of Bachelor of Engineering in Electrical and internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

of Guide Stalm

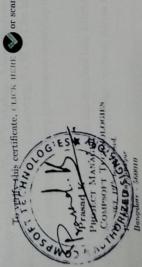


### CERTIFICATE OF INTERNSHIP

This is to certify that Harshakumar B whose USN is 1MV22EE413, has completed their Machine Learning with Python (Research Based) Internship organised and handled by Compsoft Technologies from 27<sup>th</sup> October, 2023 to 1st December, 2023.

The person to whom this certificate is addressed to has worked on a project titled **Voice clarification using ML**, As part of the project, They designed the Machine Learning Model, Demonstrated and tested the working of the Model, Prepared a report highligting its flaws by understanding the design briefs and client Specifications that were provided in the Proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.





this courtificate mass manufactured train

"Jnana Sangama", Belagavi-590 018



### ELECTRICAL & ELECTRONICS ENGINEERING

Internship Report

### "SOCIETAL ACTIVITY ON SERICULTURE"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

### MOHAN PRASAD V

1MV22EE424

### Under the Guidance of

Mr. RAJESH KUMAR .V

Assistant Professor

Department of Electrical and Electronics Engineering, Sir M.VIT, Bengaluru.



### Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "SOCIETAL ACTIVITY ON SERICULTURE" is carried out by the candidate MOHAN PRASAD V - IMV22EE424, from 26<sup>th</sup> October 2023 to 23<sup>rd</sup> November 2023, who is a bonfide student of 3<sup>rd</sup> Year at Sir M Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi . It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of the Guide

Signature of the HOD



### CERTIFICATE



This is to certify that,

### Mohan Prasad V (1MV22EE424)

has successfully completed one-month short term Internship under the societal domain, from 26-10-2023 to 23-11-2023 in Taluk Sericulture Office, Bagepalli.

Chinnakaivaramayya Assistant Director Sericulture Bagepalli division, Bagepalli A.N.Suresh babu
Sericulture demonstrator
Bagepalli

"Jnana Sangama", Belagavi-590 018



# ELECTRICAL & ELECTRONICS ENGINEERING

INTERNSHIP REPORT

## "SOCIETAL ACTIVITY ON SERICULTURE"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

JAYAKRISHNA M

1MV22EE414

Under the Guidance of

Dr. Siddappaji M.R Associate Professor



Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9091:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

### Department of Electrical & Electronics Engineering



### CERTIFICATE

SERICULTURE. is carried out by the candidate JAYAKRISHNA M-1MV22EE414, from 26th October to 23th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide



"Jnana Sangama", Belagavi-590 018



## ELECTRICAL & ELECTRONICS ENGINEERING

INTERNSHIP REPORT

### "SOCIETAL ACTIVITY ON SERICULTURE"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

KANDURI THARUNI USN-1MV22EE415

Under the Guidance of

Mr. Pradeep Kumar Associate Professor



Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001;2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

SERICULTURE, is carried out by the candidate KANDURI THARUNI -1MV22EE415, from 26th October to 23th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Lengineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide



"Jnana Sangama", Belagavi-590 018



### Internship Report

on

### "METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

### MAHANTHESH K R 1MV22EE416

Under the Guidance of

Mr.Pradeep Kumar Assisant Professor



### Department of Electrical & Electronics Engineering Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru – 562157

Department of Electrical & Electronics Engineering

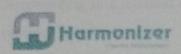


### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate MAHANTHESH K R -1MV22EE416, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been certified that all corrections and deposited in the department library. The internship duly incorporated in the report and deposited in the department library. The internship terms been approved as it satisfies the academic requirements in respect of report has been approved as it satisfies the academic requirements in Electrical and internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

### Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

202, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

### CERTIFICATE OF INTERNSHIP

This is to Certify that. Mahanthesh KR. 6th Semester - EEE at Sir M. Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd.

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period

M.R.Srinivas

CTO

Harmonizer India Pvt Ltd

Dr. Suresh H L

8-4-

HOD - EEE

Sir M Visvesvaraya Institute of Technology

HARMONIZER INDIA PVT. LTD. # 557, 1st Main, 15th Cross, RHCS Layout, Srigandhadakavalu, Nagarbhavi, BANGALORE - 560 091.

### Sir M.VISVESVARAYA INSTITUTE OF TECHNOLOGY

"Jnana Sangama", Belagavi-590 018



### ELECTRICAL & ELECTRONICS ENGINEERING

Internship Report

on

### "SOCIETAL ACTIVITY ON SERICULTURE"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

MAHESH M A IMV22EE417

Under the Guidance of

### Mr. PRADEEP KUMAR

Assistant Professor

Department of Electrical and Electronics
Engineering, Sir M.VIT, Bengaluru.



**Department of Electrical & Electronics Engineering** 

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

### Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "SOCIETAL ACTIVITY ON SERICULTURE" is carried out by the candidate MAHESH M A -1MV22EE417, from 24<sup>th</sup> October to 24<sup>th</sup> November who is a bonfide student of 6<sup>th</sup> Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi.

It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library.

The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

### CERTIFICATE ISSUED BY SAMPIGE FOUNDATION



### Sampige Foundation ನಂಪಿಗೆ ಫೌಂಡೇಶನ್

3295 5th Cross Gayathrinagar Bangalore 560021

ಪ್ರಮಾಣಪತ್ರ | CERTIFICATE

### Mahesh M A

for completing the 31-day internship program at Sampige Foundation between 24th October to 24th November

> Kiran Yadav, Founder, Sampige Foundation

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY "Jnana Sangama", Belagavi-590 018



Internship Report

on on "ENERGY CONSERVATION IN VILLAGE SECTORE"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

MALLIKARJUNA 1MV22EE418 Under the Guidance of

Mr. Pradeep Kumar Assistant Professor



## Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OFTECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

1023-24

# Sir M. VISVESVARAVA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

### Department of Electrical & Electronics Engineering

Bengaluru - 562157



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Energy conservation in village sector" is carried out by the candidate Mallikarjuna -1MV22EE418, from 26th October to 23rd November who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.





Jnana Sangama," Belagavi-590 018



Internship Report

### "SOCIETAL ACTIVITY ON SERICULTURE"

submitted in partial fulfilment of the requirements for the award of the degree of

### BACHELOR OF ENGINEERING IN

### ELECTRICAL & ELECTRONICS ENGINEERING MANJUNATHA M S Submitted by

USN: 1MV22EE419



Under the Guidance of

InternaGuide

EEE Dept., Sir MVIT Mr. PradeepKumar Assistant Professor

Bengaluru

External guide

Malleshwaram, Bengaluru Founder of Sampige Mr. Kiran Yadav Foundation

### Department of Electrical & Electronics Engineering

# SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

2023-2024

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and NBA) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

# Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "SOCIETAL ACTIVITY ON SERICULTURE" is carried out by the candidate MANJUNATHA M S -1MV22EE419, from 24<sup>th</sup> October to 24<sup>th</sup> November who is a bonfide student of 6<sup>th</sup> Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Vivesvaraya Technological University, Belagavi.

It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library.

The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.



CERTIFICATE ISSUED BY SAMPIGE FOUNDATION



Manjunatha M S

ಪ್ರಮಾಣಪತ್ರ | CERTIFICATE

for completing the 31-day internship program at Sampige Foundation between 24th October to 24th November

Kiran Yadav,

Founder, Sampige Foundation

"Jnana Sangama", Belagavi-590 018



Internship Report

TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT" "METHOD TO DETECT, MEASURE, ANALYZE

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

MANO H P 1MV22EE420

Under the Guidance of

Mr. Pradeep Kumar Assistant Professor



Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Department of Electrical & Electronics Engineering

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

### Department of Electrical & Electronics Engineering

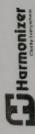


### CERTIFICATE

analyse the temperature and vibration of transformers using HOT" is carried analyse the temperature and vibration of transformers using HOT" is carried out by the candidate MANOJ HP -1MV22EE420, from 25th October 2023 to 24th out by the candidate MANOJ HP -1MV22EE420, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya November 2023 who is a part of academic requirement during his/her academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University. Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of academic requirements in Electrical and Electronics Engineering.

Caride Caride

## Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

1922, Anjanedri, 2nd floor, 11th Block, Marilingappe

Extension, Bengaluru, Karnataka g60072

### CERTIFICATE OF INTERNSHIP

This is to Certify that,  $\overline{Manoi} + P$  , 6th Semester - EEE at Sir M Visvosvannya Institute of Technology Bengaluru, has carried out the Internship conducted by Harmonizer India Pvt Ltd

Topic: Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was satisfactory during the period



M.R.Srinivas

Harmonizer India Pvt Ltd CLO

HARMONIZER INDIA PVT. LTD. # 557, 1st Male, 15th Cross, RHCS Layout, Shigandh estameth, Negaribent, BANGALORE - 540 DS1.



Dr. Suresh H L

Sir M Visvesvaraya Institute of Techno HOD - EEE

"Jnana Sangama", Belagavi-590 018



# \*METHOD TO DETECT, MEASURE, ANALYZE TEMPERATURE AND VIBRATION OF TRANSFORMERS USING 107"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

### MANOJ KUMAR Y 1MV22EE421

Under the Guidance of

### Mr. PRADEEP KUMAR

Assistant Professor

Department of Electrical and Electronics

Engineering, Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

### Department of Electrical & Electronics Engineering



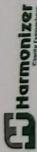
### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyses the temperature and vibration of transformers using IIOT" is carried out by the candidate MANOJ KUMARY-IMV22EE421, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya November 2023-2024, as a part of academic requirement during his/her Bachelor of term 2023-2024, as a part of academic requirement during his/her Bachelor of term 2023-2024, as a part of academic requirement his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is errified that all corrections and suggestions indicated for internal assessment have been certified that all corrections and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship report has been approved as it satisfies the academic requirements in respect of internship Engineering.

Sign and Sign

M Signature of Hood

Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marillingappa Extension, Bengaluru, Karnataka 560072

### CERTIFICATE OF INTERNSHIP

Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted This is to Certify that, Manoj Kumar, 6th Semester - EEE at Sir M

Topic: Method to detect, measure, analyze temperature and vibration of

Internship Period: 25th October 2023 to 24th November 2023

He/She was regular and punctual in his/her attendance and his/her conduct was

M.R.Srinivas

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. Sribendhadakwalu, Negathavi, LTD. BANGALORE - 560 061.

Dr. Suresh H L HOD - EEE

Sir M Visvesvaraya Institute of Technology

"Jnana Sangama", Belagavi-590018



Internship Report

"INNOVATING ENGINEERING LEADERSHIP"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

### MOHAMMED AEYTESHAM AHMED 1MV22EE422

Under the Guidance of

Mr.V. Rajesh Kumar Assistant Professor



Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001;2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –562157

2023-2024

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, 180 9001,2098 Centified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru –
5621.57

### Department of Electrical & Electronics Engineering



### CERTIFICATE

LEADERSHIP" is carried out by the candidate MOHAMMED AEYTESHAM AHMED LEADERSHIP" is carried out by the candidate MOHAMMED AEYTESHAM AHMED MV22EE422, from 25th October to 24th November who is a bonfide student of 6th Semester at Sir IMV22EE422, from 25th October to 24th November who is a bonfide student of 6th Semester at Sir A. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Suide

Signature of HOP N

M

Signature of Guide

# THE CATIFICATE PROVIDED BY COMPANY



Digistack Soft Systems Pvt Ltd

## CERTIFICATE

STARTCODE

TO CERTIFY THAT

Name: Mr. Mohamned Acytesham, Ahmed

College: Wr M Wheevering Institut of Technology, Bangalour USN NO: INIVABERHAL

Has successfully completed the internship program on "Innovative Engineering Leadership" with for a period of 30 days REG ID: IEL/EC/SC/1016/53

Program Manager

Laith

Granted on

25/11/2023

Jad Floor, Aditi Rudio Arsoda, No. 546/R., Visoyaka Layout, Nagarabkoovi-540072

www.digistacksoft.com

Program Coach ASrichar .

C.NO:DIGB /IEL/EC/SC/1016/53

hr@disgistacksoft.com

Jnana Sangama," Belagavi-590 018



Internship Dairy

### "INNOVATING ENGINEERING LEADERSHIP"

submitted in partial fulfilment for the award of the degree (21INT68)

### BACHELOR OF ENGINEERING IN

### ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

### MOHAMMEDRAFIQ SHAIKH USN: 1MV22EE423

Under the Guidance Mrs. V. Rajesh Kumar Associate Professor

Department of Electrical and Electronics Engineering Sir M.VIT, Bengaluru



Department of Electrical & Electronics Engineering

SIR M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off International Airport Road, Krishnadeva Raya Nagar,

Bengaluru - 562157

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

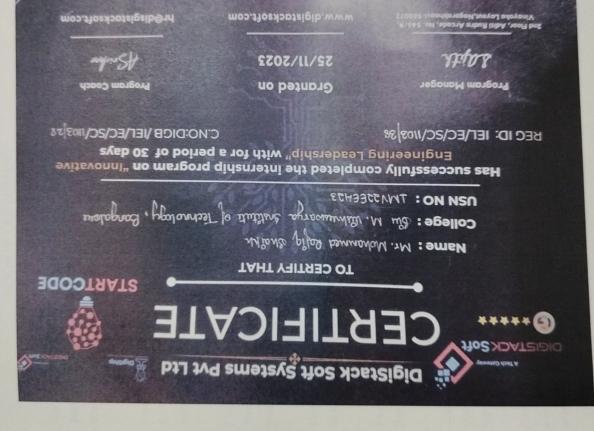
It is to certified that the INTERNSHIP entitled "INNOVATING ENGINEERING LEADERSHIP" is carried out by the candidate MOHAMMEDRAFIQ SHAIKH IMV22EE423, from 25th October to 24th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya from 25th October to 24th November who is a bonfide student of the credits for the academic term 2023-Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions Visvesvaraya Technological University, Belagavi. It is certified that all corrections and deposited in the indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics

Engineering.

Signature of HOD

Guide

Signature



"Juana Sangama", Belagavi-590 018



Internship Report

"METHOD TO DETECT, MEASURE, ANALYZE

TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT"

Submitted in partial fulfilment for the award of degree (211NT68)

Submitted by

NATARAJA TJ 1MV22EE426 Under the Guidance of

Mr. V Rajesh Kumar Assistant Professor



## Department of Electrical & Electronics Engineering

Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Carafied)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - S62157

2023-2024

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

### Department of Electrical & Electronics Engineering



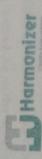
### CERTIFICATE

It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using IIOT" is carried out by the candidate NATARAJA T J -1MV22EE426, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya November 2023 who is a part of academic requirement during his/her Bachelor academic term 2023-2024, as a part of academic requirement during his/her Bachelor academic term 2023-2024, as a part of academic requirement at it is of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is of Engineering degree from the visvesvaraya and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The been duly incorporated in the report and deposited in the generation in respect internship work prescribed for the course of Bachelor of Engineering in Electrical of internship work prescribed for the course of Bachelor of Engineering in Electrical

and Electronics Engineering.

Signature of Hon

# Certificate issued by Harmonizer India PVT LTD



### HARMONIZER INDIA PVT LTD

292, Anjanadri, 2nd floor, 11th Block, Marilingappa Extension, Bengaluru, Karnataka 560072

### CERTIFICATE OF INTERNSHIP

This is to Certify that, Nataraja T J , 6th Semester - EEE at Sir M Visvesvaraya Institute of Technology Bengaluru, has carried out the Internship conducted by

Topics Method to detect, measure, analyze temperature and vibration of Transformers using HOT

Internship Period: 25th October 2023 to 24th November 2023

satisfactory during the period



M.R.Srinivas

Harmonizer India Pvt Ltd

HARMONIZER INDIA PVT. LTD. 8557, 1st Main, 16th Cross, RNCS Layout, Srigandhadakavalu, Nagarbhavi, BANSALORE - 560 091.



Dr. Suresh H L

"Jnana Sangama", Belagavi-590 018



Internship Report

TEMPERATURE AND VIBRATION OF TRANSFORMERS USING HOT" "METHOD TO DETECT, MEASURE, ANALYZE

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

NAVEEN KUMAR N 1MV22EE427

Under the Guidance of

Mr.V.RAJESH KUMAR Assisant Professor



Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY Department of Electrical & Electronics Engineering

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempegowda International Airport Road, Krishnadevaraya Nagar, Bengaluru – 562157

2023-2024

# Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001.2008 Certified) Off Kempegowda International Airport Road, Krishnadevaraya Nagar,

Bengaluru - 562157

## Department of Electrical & Electronics Engineering



### CERTIFICATE

term 2023-2024, as a part of academic requirement during his/her Bachelor of certified that all corrections and suggestions indicated for internal assessment have been report has been approved as it satisfies the academic requirements in respect of It is to certified that the INTERNSHIP entitled "Method to detect, measure, analyse the temperature and vibration of transformers using HOT" is carried out by the candidate NAVEEN KUMAR N -1MV22EE427, from 25th October 2023 to 24th November 2023 who is a bonafide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic Engineering degree from the Visvesvaraya Technological University, Belagavi. It is duly incorporated in the report and deposited in the department library. The internship internship work prescribed for the course of Bachelor of Engineering in Electrical and

Electronics Engineering.

42/8/

## Certificate issued by Harmonizer India PVT LTD

### Harmonizer

HARMONIZER INDIA PVT LTD

This is to Corn's that Naveen Kumar N and Service 111 of St. 14 Vinconstrain Destruction (Tableships, Recommended on the Internal operation).

Topic: Method to detect, measure.



### M.R.Srinivas

HARBONIZER INDIA PUT, LTD. 557, fel Man, 15th Coss, RHS Layou, Strandhedekevala, Nagarbiani, RANGAL DES. KYSTATSPANI, Harmonizer India Pvt Ltd

Dr. Suresh H L

"Jnana Sangama", Belagavi-590 018



### **ELECTRICAL & ELECTRONICS ENGINEERING**

INTERNSHIP REPORT On

### "SOCIETAL ACTIVITY ON SERICULTURE"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

NAVYA N

1MV22EE428

Under the Guidance of

Mr. Rajesh Kumar V Associate Professor



Department of Electrical & Electronics Engineering

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified) Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

### Department of Electrical & Electronics Engineering



### CERTIFICATE

It is to certified that the INTERNSHIP entitled "SOCIETAL ACTIVITY OF SERICULTURE" is carried out by the candidate NAVYA N -1MV22EE428, from 26th October to 23th November who is a bonfide student of 6th Semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment of the award of the credits for the academic term 2023-2024, as a part of academic requirement during his/her Bachelor of Engineering degree from the Visvesvaraya Technological University, Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Signature of HOD

### CERTIFICATE ISSUED BY SOCIETAL ACTIVITY ON SERICULUTRE



### CERTIFICATE



This is to certify that,

### Navya. N (1MV22EE428)

has successfully completed one-month short term Internship under the societal domain, from 26-10-2023 to 23-11-2023 in Taluk Sericulture Office, Bagepalli.

Chinnakaivaramayya Assistant Director Sericulture Bagepalli division, Bagepalli

Bagepalli

"Jnana Sangama", Belagavi-590 018



### ELECTRICAL & ELECTRONICS ENGINEERING

Internship dairy

on

### "MACHINE LEARNING USING PYTHON"

Submitted in partial fulfilment for the award of degree (21INT68)

Submitted by

**PAVANS** 

1MV22EE429

Under the Guidance of

### Mr. RAJESH KUMAR

Assistant Professor

Department of Electrical and Electronics Engineering Sir M.VIT, Bengaluru.



Department of Electrical & Electronics Engineering

### SIR M. VISVESVARAYA INSTITUTE OF TECHNOLGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)
Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar,
Bengaluru – 562157

### Sir M. VISVESVARAYA INSTITUTE OF TECHNOLOGY

(Approved by AICTE New Delhi, Affiliated to VTU, Belagavi, ISO 9001:2008 Certified)

Off Kempe Gowda International Airport Road, Krishnadevaraya Nagar, Bengaluru - 562157

Department of Electrical & Electronics Engineering



### CERTIFICATE

This is to certified that the Internship entitled "Machine Learning with Python" is carried out by the PAVAN S, USN: 1MV22EE429, from 27<sup>th</sup> October to 1<sup>st</sup> December who is a bonafide student of 6<sup>th</sup> semester at Sir M. Visvesvaraya Institute of Technology, towards fulfillment for the award of the credits for the academic term 2023-2024, as a part of academic requirement during his Bachelor of Engineering degree from the Visvesvaraya Technological University Belagavi. It is certified that all corrections and suggestions indicated for internal assessment have been duly incorporated in the report and deposited in the department library. The internship has been approved as it satisfies the academic requirements in respect of internship work prescribed for the course of Bachelor of Engineering in Electrical and Electronics Engineering.

Signature of Guide

Signature of HOD



### CERTIFICATE OF INTERNSHIP

This is to certify that Pavan S whose USN is 1mv22ee429, has completed their Machine Learning with Python (Research Based) Internship organised and handled by Compsoft Technologies from 27<sup>th</sup> October, 2023 to 1<sup>st</sup> December, 2023.

The person to whom this certificate is addressed to has worked on a project titled Voice classification using ML, As part of the project, They designed the Machine Learning Model, Demonstrated and tested the working of the Model, Prepared a report highligting its flaws by understanding the design briefs and client Specifications that were provided in the Proposal.

During the course of the internship, they demonstrated good design skills with a self-motivated attitude to learning new things. Their performance exceeded expectations and was able to complete the project successfully on time.





www.compstechnlogies.com services@compstechnologies.com

This certificate was generated using CERCITETA COME