Jnana Sangama, Belgavi-590014



#### **PROJECT REPORT**

ON

### **IMPLEMENTATION OF IOT BASED EARLY FLOO DETECTION**

#### **AND ALARMING**

Submitted in partial fulfillment of the requirements for 8<sup>th</sup> semester

**Bachelor of Engineering** 

In

## **ELECTRONICS AND COMMUNICATION ENGINEERING**

Submitted by

KAMPALLI SOHITH KOVI SHARATH CHANDRA THOTA MOHAN BABU V ANIL KUMAR 1KG19EC047 1KG19EC052 1KG19EC096 1KG19EC099

Under the Guidance of

Mrs. Swati Sarkar

Assistant Professor, Department of ECE, KSSEM

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU- 560109 2022-2023

#### CERTIFICATE

This is to certify that the project work entitled "IMPLEMNTATION OF IOT BASED EARLY FLOOD DETECTION AND ALARMING" are carried out by Kampalli Sohith (1KG19EC047), Kovi Sharthchandra (1KG19EC052), Thota Mohanbabu (1KG19EC062), V.Anilkuamr (1KG19EC090), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of 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 Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

#### **Internal Guide**

Mrs. Swati Sarkar Assistant Professor Dept. of ECE

Name of the Examiners

#### Head of the Department

Dr. K Senthil Babu Professor & Head Dept. of ECE

Principal

15. Formo

Dr. K. Rama Narasimha Principal/Director **KSSEM** Dr. K. RAMA NARASIMHA

Professor & Head Principal/Director Dept. of Electronics & Communication Engineering and Manageme K. S. School of Engineering & Management Sencature ate 109 Bangalore-560 109

1. Dr. Chauda. V. Leddy 2 Dr. K. Scattil Babu.

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

## BANK LOCKER SECURITY SYSTEM WITH TWO WAY AUTHENTICATION AND SAFETY MEASURES

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

BANA SUDHEER KUMAR REDDY DEEPTHI SSHRIE R H GOWTHAMI S SHIVANI K PATIL 1KG19EC010 1KG19EC022 1KG19EC035 1KG20EC401

Under the Guidance

of

Dr. GIRISH V ATTIMIRAD

Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **Bank Locker Security System With Two Way Authentication And Safety Measures** is carried out by **Bana Sudheer Kumar Reddy** (**1KG19EC010**), **Deepthi Sshrie R H (1KG19EC022)**, **Gowthami S (1KG19EC035)**, **Shivani K Patil (1KG20EC401)**, bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project work report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

**Principal** 

Dr. Girish V Attimirad Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE Dr K. Rama Narasimha KSSEM

Name of the Examiners 1

Signature with Date

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

Implementation of Self-Sealing Smart Dustbin using IoT

Submitted in Partial Fulfillment of the Requirements for 8<sup>th</sup> Semester

**Bachelor of Engineering** 

in

Electronics and Communication Engineering by

PAVAN K PRASHANTH G PRASHANTH S VAISHNAVI U P 1KG19EC070 1KG19EC075 1KG19EC076 1KG19EC098

Under the Guidance of Mr. SYED WASEEM TABRAIZ Assistant Professor, Department of ECE, KSSEM

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### K. S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **Implementation of Self-Sealing Smart Dustbin using IoT** carried out by **Pavan K** (1KG19EC070) **Prashanth G** (1KG19EC075) **Prashanth S** (1KG19EC076) **Vaishnavi U P** (1KG19EC098) bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

#### Head of the Department

**Principal** 

Mr. Syed Waseem Tabraiz Assistant Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE Dr. K. Rama Narasimha Principal/Director KSSEM

**External Viva** 

Name of the Examiners

1

2

Signature with Date

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

# Implementation of a Prototype Automatic Compression Mechanism for Bag Valve Mask

Submitted in Partial fulfilment of the Requirements for 8<sup>th</sup> Semester Bachelor of Engineering in Electronics and Communication Engineering

by

CHIRAG S DHANUSH K SAMARTH SRINIVAS DHEVA C 1KG19EC020 1KG19EC024 1KG19EC085 1KG20EC400

Under the Guidance of

#### Mr. GOPALA KRISHNA MURTHY C.R

Asst. Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### **CERTIFICATE**

This is to certify that the Project work entitled Implementation of a Prototype Automatic Compression Mechanism for Bag Valve Mask is carried out by Chirag S (1KG19EC020), Dhanush K (1KG19EC024), Samarth Srinivas (1KG19EC085) and Dheva C (1KG20EC400), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Gopala Krishna Murthy C R Assistant Professor Dept. of ECE

Head of the Department

Dr. K Senthil Babu Professor & Head Dept. of ECE Professor & Head

Dept. of Electronics & Colomunication Engineering Dr. K. RAMA NARASIMHA K. S. School of Engineering & Management Frincipal/Director Bangalore-560 109

Principal

Dr. K Rama Narasimha Principal & Director **KSSEM** 

Bengaluru - 560 109

Signature with Date

Name of the Examiners

2

Jnana Sangama, Belagavi-590014



# PROJECT REPORT

ON

Implementation of an Automated Portable Hydroponic System for Indoor Environment. Submitted in Partial fulfillment of the Requirements for 8<sup>th</sup>Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

KAVYA C KAVYA S E KEERTHANA B R MADAN C B 1KG19EC049 1KG19EC050 1KG19EC051 1KG19EC056

Under the Guidance

of

Dr K. SENTHIL BABU

Professor & Head, Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **Implementation of an Automated Portable Hydroponic System for Indoor Environment** carried out by Kavya C (1KG19EC049), Kavya SE (1KG19EC050), Keerthana BR (1KG19EC051), Madan C B (1KG19EC056), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide & Head of the Department

Dr. K Senthil Babu Professor & Head Dept. of ECE Professor & Head Dept. of Electronics & Communication Engineerity K. S. School of Engineering & Management Bangalore-560 109

Name of the Examiners

Principal

K. Como 1

Dr K. Rama Nara<del>sim</del>ha KSSEM **Dr. K. RAMA NARASIMHA** Principal/Director K S School of Engineering and Managem Bengaluru - 560 109

Signature with Date

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Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

#### ON

### AN IOT-BASED SMART WEARABLE SYSTEM FOR

### MONITORING ASTHMA PATIENTS

## Submitted in partial fulfillment of the requirements for 8<sup>th</sup> semester

#### **Bachelor of Engineering**

In

#### **ELECTRONICS AND COMMUNICATION ENGINEERING**

Submitted by

JETTI BHEEMESH MANAM TEJA MONIKA V G SNEHA B 1KG19EC043 1KG19EC058 1KG19EC062 1KG19EC090

Under the Guidance of

Mrs. Renuka V Tali

Assistant Professor,

Department of ECE, KSSEM

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU- 560109 2022-2023

## CERTIFICATE

This is to certify that the project work entitled "AN IOT-BASED SMART WEARABLE SYSTEM FOR MONITORING ASTHMA PATIENTS" are carried out by Jetti Bheemesh (1KG19EC043), Manam Teja (1KG19EC058), Monika V G (1KG19EC062), Sneha B (1KG19EC090), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of 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 Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

**Internal Guide** 

Head of the Department

Principal

Mrs. Renuka V Tali Assistant Professor Dept. of ECE Dr. K Senthil Babu Professor & Head Dept. of ECE

Dr. K. Rama Narasimha Principal/Director KSSEM

Name of the Examiners

1.

2.

Signature with date

JnanaSangama, Belgavi-590014



# PROJECT REPORT

ON

# DESIGN OF SMART AND SECURE COURIER BOX USING IOT

Submitted in partial fulfillment of the requirements for 8<sup>th</sup> semester

**Bachelor of Engineering** 

In ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

CHAITRA S	1KG19EC017
CHANDINI P	1KG19EC018
JAHNAVI RAMAKRISHNA	1KG19EC042
LAVANYA B V	1KG19EC053

Under the Guidance

of

# Dr. MANU D K

Associate Professor,

Department of ECE,KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU- 560109 2022-2023

## K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

# CERTIFICATE

This is to certify that the project work entitled "DESIGN OF SMART AND SECURE COURIER BOX USING IOT" are carried out by Chaitra S (1KG19EC017), Chandini P(1KG19EC018), Jahnavi R (1KG19EC042) , Lavanya B V (1KG19EC053),bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of 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 Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Internal Guide

Dr. Manu D K Associate Professor Dept. of ECE

Name of the Examiners

Head of the Department

Dr. K Senthil Babu Professor & Head Dept of ECE

Professor & Head Dept. of Electronics & Cu. munication Engineering K S School of Engineering and Managemen K. S. School of Engineering & Management Bangalore-580 109

Principal

1 C. Rorrol

Dr. K. Rama Narasimha Principal/Director KSSEM

Dr. K. RAMA NARASIMHA Principal/Director Bengaluru - 560 109

Signature with date

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L.

2.

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

#### IMPLEMENTATION OF PROTOTYPE FOR CAR ACCIDENT DETECTION

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

ANKUSH B L DHUREEN L GAGAN SAGAR K M HARISH KAYSHYAP 1KG19EC007 1KG19EC028 1KG19EC031 1KG19EC038

Under the Guidance

of

#### VIJAYALAXMI KALAL

Assistant Professor,

Department of ECE, KSSEM

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### CERTIFICATE

This is to certify that the Project work entitled Implementation of Prototype for Accident Detection System are carried out by Ankush B L (1KG19EC007), Dhureen B L (1KG19EC028), Gagan Sagar K M (1KG19EC031), Harish Kashyap (1KG19EC038), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Head of the Department

**Principal** 

Mrs. Vijayalaxmi Kalal Assistant Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE Dr K. Rama Narasimha KSSEM

Name of the Examiners 1

Signature with Date

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

IOT BASED CROP MONITORING AND FORTIFICATION - CROP SPECIFICATION

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

A GEERVANI C GIRISHMA SAI DHARMAVARAPU PRATHYUSHA MAHESHWARI A. V 1KG19EC004 1KG19EC016 1KG19EC026 1KG18EC031

Under the Guidance

of

Mrs. JAYASHREE G R

Asst. Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **IOT Based Crop Monitoring And Fortification** - **Crop Specification** is carried out by A Geervani (1KG19EC004), C Girishma Sai (1KG19EC016), Dharmavarapu Prathyusha (1KG19EC026), Maheshwari A V (1KG18EC031), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

**Principal** 

Mrs.Jayashree G R Asst. Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE Dr K. Rama Narasimha KSSEM

Name of the Examiners 1

**Signature with Date** 

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

#### ON

### CHARACTERIZATION AND CALIBRATION OF GAS SENSORS FOR AIR QUALITY MONITORING

Submitted in Partial fulfillment of the Requirements for 7th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

ANIRUDH G

(1KG19EC005)

**B GOWTHAM** 

BHUVAN S

DHEERAJ M

(1KG19EC008)

(1KG19EC014)

(1KG19EC027)

Under the Guidance

Of

Dr. Kishore M

**Assistant Professor** 

#### **Department of ECE, KSSEM**

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the project work entitled **CHARACTERIZATION AND CALIBRATION OF GAS SENSORS FOR AIR QUALITY MONITORING** carried out by ANIRUDH G (1KG19EC005), B GOWTHAM (1KG19EC008), BHUVAN S (1KG19EC014), DHEERAJ M (1KG19EC027) bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Head of the Department

**Principal** 

Dr.Kishore M Assistant Professor Dept. of ECE Dr.Girish V Attimarad Head of Department Dept. of ECE Dr.K.Rama Narasimha KSSEM

Name of the Examiners

**Signature with Date** 

2

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

#### **IDENTIFICATION OF LEAF DISEASES USING NEURAL NETWORKS**

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

JAGARLAMUDI KAVYASREE PAVANI POKURI POOJA A B SIREESHA.R 1KG19EC041 1KG19EC071 1KG19EC072 1KG19EC089

Under the Guidance

of

**Prof. Sanjay Nayak** 

Associate Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **Identification of Leaf Diseases using Neural Networks** are carried out by **Jagarlamudi Kavyasree** (**1KG19EC041**), **Pavani Pokuri** (**1KG19EC071**), **Pooja A B** (**1KG19EC072**), **Sireesha.R** (**1KG1EC089**), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

Head of the Department

**Principal** 

**Prof. Sanjay Nayak** Associate Professor Dept. of ECE **Dr. K. Senthil Babu** Professor & Head Dept. of ECE Dr. K. Rama Narasimha Principal/Director KSSEM

Name of the Examiners

1

2

**Signature with Date** 

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

## EYE TRACKING SYSTEM FOR APPLIANCE CONTROL BY PARALYZED PATIENTS

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

DEVAPATHNI PAVAN KUMAR1KG19EC023LINGUTLA TARUN KUMAR1KG19EC054MALAPATI DILEEP1KG19EC057MODUPALLI PAVAN KUMAR1KG19EC060

Under the Guidance

of

#### **RAVIKIRAN B**. A

Asst Professor, Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### CERTIFICATE

This is to certify that the Project work entitled Eye Tracking System for Appliance Control by Paralyzed Patients are carried out by Devapathni Pavan Kumar (1KG19EC023), Lingutla Tarun Kumar (1KG19EC054), Malapati Dileep (1KG19EC057), Modupalli Pavan Kumar (1KG19EC060), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

Principal

Mr. Ravikiran B. A. Asst Professor Dept. of ECE Dr. K Senthil Babu Head of Department Dept. of ECE

Dr. K. Rama Narasimha Principal/Director KSSEM

Name of the Examiners

Signature with Date

1

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

#### DESIGN AND IMPLEMENTATION OF AUTOMATIC PET FEEDER USING ARDUINO

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

BHARATH KUMAR R KAKARLA SAI ABHIRAM NAVYA S SURABHI N 1KG19EC012 1KG19EC046 1KG19EC065 1KG19EC094

Under the Guidance

of

#### Mr. GOPALAKRISHNA MURTHY C R

Assistant Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled as **Design and Implementation of Automatic pet feeder Using Arduino** is carried out by Bharath Kumar R (1KG19EC012), Kakarla Sai Abhiram (1KG19EC046), Navya S (1KG19EC065), Surabhi N (1KG19EC094), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

#### **Internal Guide**

Head of the Department

Principal

Mr. GopalaKrishna Murthy C R Assistant Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE Dr. K. Rama Narasimha Principal/Director KSSEM

#### Name of the Examiners

**Signature with Date** 

1

Jnana Sangma, Belagavi-590014



### PROJECT REPORT ON

Design And Fabrication of a Prototype for Knee Rehabilitation Submitted in Partial fulfillment of the Requirements for 8<sup>th</sup> Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

NIRIKSHA V MURTHY1KG19EC067NITHIN L1KG19EC068PRAJWAL SK1KG19EC073PRATYUSH KUMAR1KG19EC078

Under the Guidance

of

Dr. K. SENTHIL BABU

Professor & Head Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **Design and Fabrication of a Prototype for Knee Rehabilitation** are carried out by Niriksha V Murthy (1KG19EC067), Nithin L (1KG19EC068), Prajwal SK (1KG19EC073), Pratyush Kumar (1KG19EC078), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-I report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

#### Internal Guide / Head of the Department

Dr. K Senthil Babu Professor & Head Dept. of ECE KSSEM Professor & Head Dept. of Electronics & Comunication Engineering K. S. School of Engineering & Management Bangelore 500 109 Name of the Examiners **Principal** 

Dr K. Rama Narasimha Principal / Director Dr. K. RAMAMARASIMHA Principal/Director K S School of Engineering and Management Bengaluru - 580 109

Signature with Date

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

## A COMPARISON STUDY ON PERFORMANCE OF FIXED AND SOLAR TRACKING SYSTEM

Submitted in Partial fulfillment of the Requirements for 8<sup>th</sup> Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

By

PRAMOD R RAGHU R SAGAR B T SUDEEP G R 1KG19EC074 1KG19EC081 1KG19EC083 1KG19EC092

Under the Guidance

of

Mr. Sanjay B. Nayak

Associate Professor

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled **A COMPARISON STUDY ON PERFORMANCE OF FIXED AND SOLAR TRACKING SYSTEM** are carried out by Pramod R (1KG19EC074), Raghu R (1KG19EC081), Sagar B T (1KG19EC083), Sudeep G R (1KG19EC092), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

Principal

Mr. Sanjay B. Nayak Associate Professor Dept. of ECE Dr. K Senthil Babu Professor & Head Dept. of ECE Dr K. Rama Narasimha Principal/Director KSSEM

#### Name of the Examiners

1

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2

#### **Signature with Date**

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

#### SMART ELECRONIC AID FOR VISUALLY IMPAIRED

Submitted in Partial fulfilment of the Requirements for 8<sup>th</sup> Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

R SASIKALA SAICHARITHA Y SHUBHA M SUMA B L 1KG19EC080 1KG19EC084 1KG19EC088 1KG19EC093

Under the Guidance of

Mrs. Bhargavi V Sangam

Asst. Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled Smart Electronic Aid for Visually Impaired is carried out by R Sasikala (1KG19EC080), Saicharitha Y (1KG19EC084), Shubha M (1KG19EC088), Suma B L (1KG19EC093), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Mrs. Bhargavi V Sangham Asst. Professor Dept. of ECE, KSSEM

Name of the Examiners

1

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Head of the Department

Dr. K. Senthil Babu Professor and head Dept. of ECE, KSSEM Principal

15. Re

Dr K. Rama Narasimha KSSEM

Dr. K. RAMA NARASIMHA Principal/Director Professor & Head K S School of Engineering and Management Dept. of Electronics & Communication Engineering Bengaluru - 560 109 K. S. School of Engineering & Management Bangalore-560 109

Jnana Sangma, Belagavi-590014



#### **PROJECT REPORT**

ON

#### DEVELOPMENT OF A WIRELESS MOBILE COMPUTING PLATFORM FOR FALL RISK DETECTION

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

V BHARATH KUMAR BINDHU SHREE R G SATHEESH GOALLA LIKHITHA 1KG17EC088 1KG19EC015 1KG19EC030 1KG19EC033

Under the Guidance of

Dr. MANU D K

Associate Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

#### CERTIFICATE

This is to certify that the Project work entitled "Development Of Wireless Mobile Computing Platform For Fall Risk Detection" are carried out by V Bharath Kumar (1KG17EC088), Bindhu Shree R(1KG19EC015), G Satheesh (1KG19EC030), Goalla Likhitha (1KG19EC033), bonifide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

**Principal** 

Dr. Manu D K Assoc. Professor Dept. of ECE

Name of the Examiners

Dr. K Senthil Babu Professor & Head, Dept. of ECE

Dr K. Rama Narasimha KSSEM

**Signature with Date** 

1

#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

on

**Development and Implementation of Driver Drowsiness Detection System** 

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

ANJALI M CHARITHA P LOGANATHAN HARSHITH KUMAR K M NARRA MAHESH CHANDRA 1KG19EC006 1KG19EC019 1KG19EC039 1KG19EC064

Under the Guidance

of

Dr Karthik P

Professor,

Department of ECE, KSSEM

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

#### CERTIFICATE

This is to certify that the Project work entitled Development and Implementation of Driver Drowsiness Detection System are carried out by Anjali M (1KG19EC006), Charitha P Loganathan (1KG19EC019), Harshith Kumar K M (1KG19EC039), Narra Mahesh Chandra (1KG19EC064) bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project Phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

Principal

Dr. Karthik P Professor. Dept. of ECE

Dr. K Senthil Babu Professor and Head, Dept. of ECE

Name of the Examiners K. S. School of Engineering & Management

1 pr. Chavda, V. Leddy 2 pr. K. Seuttil Baby

Professor & Head

15. Com

Dr K. Rama Narasimha Principal/Director,

Dr. K. RAMANARASIMHA Principal/Director Dept. of Electronics & Communication Engineering S School of Engineering and Management Signature With 9

Jnana Sangma, Belagavi-590014



#### **PROJECT REPORT**

on

### IMAGE PROCESSING BASED MAPPING AND SURVEYING OF LAND USING DRONE

Submitted in Partial fulfillment of the Requirements for 8th Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

G DURGA PRASAD GOGINENI GAMBHIR HARI PRASATH B K SANTHI SWAROOP 1KG19EC029 1KG19EC034 1KG19EC037 1KG19EC045

Under the Guidance

of Dr. Karthik P

**D** (

Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

## **K.S.SCHOOL OF ENGINEERING AND MANAGEMENT** DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### CERTIFICATE

This is to certify that the Project work entitled "Image Processing Based Mapping and Surveying Based Mapping and Surveying of Land Using Drone" are carried out by G Durga Prasad (1KG19EC029), Gogineni Gambhir (1KG19EC034), Hari Prasath B (1KG19EC037), K Santhi Swaroop (1KG19EC045), bonifide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

Principal

Dr. Karthik P Professor Dept. of ECE Dr. K Senthil Babu Professor & Head, Dept. of ECE Dr K. Rama Narasimha KSSEM

Name of the Examiners

1

2

Signature with Date

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

#### ON

#### IOT BASED SMART WAREHOUSE MONITORING SYSTEM

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

MANJUNATH M PRATHYUSHA SHREE RAKSHA H STEFFI K THOMAS 1KG19EC059 1KG19EC077 1KG19EC087 1KG19EC091

Under the Guidance

of

Mrs. Deepa R Bhangi

Assistant Professor,

Department of ECE, KSSEM

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

# K.S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### CERTIFICATE

This is to certify that the Project work entitled **IoT Based Smart Warehouse Monitoring System** are carried out by **Manjunath M (1KG19EC059), Prathyusha (1KG19EC077), Shree Raksha H (1KG19EC087), Steffi K Thomas (1KG19EC091),** bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

**Internal Guide** 

Head of the Department

**Principal** 

Mrs. Deepa R Bhangi Assistant Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE Dr K. Rama Narasimha Principal/ Director KSSEM

Name of the Examiners

Signature with Date

2

1

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

#### DESIGN OF A FITNESS MONITORING SYSTEM FOR GYM USERS

Submitted in Partial Fulfillment of the Requirements for the 8<sup>th</sup> Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

AMRIT SARKAR P. DIVAKAR R. J. YASWANTH TOWQEER MADNI 1KG19EC002 1KG19EC069 1KG19EC079 1KG19EC097

Under the Guidance

of

Mr. RAVIKIRAN B A

Asst. Professor, Department of ECE, KSSEM

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S.SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109

2022-23

## **K.S.SCHOOL OF ENGINEERING AND MANAGEMENT** DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### CERTIFICATE

This is to certify that the Project work entitled **DESIGN OF A FITNESS MONITORING SYSTEM FOR GYM USERS** is carried out by **AMRIT SARKAR (1KG19EC002), P DIVAKAR (1KG19EC069), R. J. YASWANTH (1KG19EC079), TOWQEER MADNI** (**1KG19EC097**), a bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project phase-II report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of the Project work prescribed for the said Degree.

Internal Guide

Head of the Department

**Principal** 

Ravikiran B A Asst. Professor Dept. of ECE Dr. K. Senthil Babu Professor & Head Dept. of ECE

Dr K. Rama Narasimha Principal/Director KSSEM

Name of the Examiners

**Signature with Date** 

1

2

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangam, Belagavi-590014



#### **PROJECT REPORT**

ON

#### **EMBEDDED BASED VEHICLE THEFT DETECTION**

Submitted in Partial fulfilment of the Requirements for 8<sup>th</sup> Semester Bachelor of Engineering in Electronics and Communication Engineering

by

DHANUSH M BHARATH K THARUN M 1KG19EC025 1KG19EC044 1KG19EC055

Under the Guidance of Dr. KISHORE M Asst. Professor, Department of ECE, KSSEM

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

# K.S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Embedded Based Vehicle Theft Detection are carried out by Dhanush M (1KG19EC025), Bharath K (1KG19EC044), Tharun M (1KG19EC055), bonafide students of KSSEM in partial fulfilment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Internal Guide

16/5/23

Name of the Examiners La. V. Reddy 1 Dr. Chevela. V. Reddy 2 Dr. K. Seothil Bohn

Dr. Kishore M Asst.Professor Dept. of ECE Head of the Department

Dr. K Senthil Babu

Dr. K Sentini Babu Professer & Head Dept. of Electro Dept. Of EOEcation Engineering K. S. School of Engineering & Management Bangalore-560 109

Principal

15. Romer

Dr K. Rama Narasimha Principal & Director My KSSEM Dr. K. RAMA NARASIMHA Principal/Director K S School of Engineering and Managemen Bengalury - 560 109

Signature with

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

#### ON

### **SMART HELMET**

Submitted in Partial fulfillment of the Requirements for 8" Semester

# **Bachelor of Engineering**

#### in

**Electronics and Communication Engineering** 

by

LOKESH BABU B YAŚWANTH D SANTOSH KUMAR B HARISH T

1KG19EC009 1KG19EC021 1KG19EC086 1KG19EC095

Under the Guidance

of

### DILEEP J

Assistant Professor,

Department of ECE, KSSEM

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K. S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

# K. S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### CERTIFICATE

This is to certify that the Project work entitled Smart Helmet are carried out by Lokesh Babu(1KG19EC009), Yaswanth D(1KG19EC021), Santosh Kumar B(1KG19EC086), Harish T(1KG19EC095), bonafide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvarava Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

#### Internal Guide

Head of the Department

Principal

2

Mr. Dileep J Assistant Professor Dept. of ECE

Dr. K. Semhil Babu Professor & Head Dept. of ECE

5. Com

Dr K. Rama Narasimha KSSEM Dr. K. RAMA NARASIMHA Principal/Director

Signature with Date

Protessor & riead Dept. of Electronics & Cull munication Engineering and Management Bengaluru - 550 109 K. S. School of Engineering & Management Bangalore-560 109

Name of the Examiner Dr. Charda. V. Reddy Dr. K. Scather Baby

Jnana Sangama, Belagavi-590014



#### **PROJECT REPORT**

ON

#### SMART SHOPPING TROLLEY WITH AUTOMATED BILLING

Submitted in Partial fulfilment of the Requirements for 8<sup>th</sup> Semester Bachelor of Engineering

in

**Electronics and Communication Engineering** 

by

AAFIYA KULSOOM BHAGYALAKSHMI JH BHAVANA S KARUNA S 1KG19EC001 1KG19EC011 1KG19EC013 1KG19EC048

Under the guidance

of

Dr. Girish. V. Attimarad

Professor, Department of ECE, KSSEM

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K.S SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-2023

## K.S SCHOOL OF ENGINEERING AND MANAGEMENT

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### CERTIFICATE

This is to certify that the project work entitled "Smart Shopping Trolley With Automated Billing" is carried out by Aafiya Kulsoom (1KG19EC001), Bhagyalakshmi J H (1KG19EC011), Bhavana S (1KG19EC013) and Karuna S (1KG19EC048) bonafide students of K.S. School Of Engineering & Management in partial fulfilment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

#### **Internal Guide**

Dr.Girish.V.Attimarad

Professor, Dept. of ECE Head of the Department

Dr. K Senthil Babu Professor & Head, Dept. of ECE

Professor & Head Principal/Director Dept. of Electronics & Cur munication Engineering & School of Engineering and Management K. S. School of Engineering & Management Bangalore-560 109

Principal

K. Romo,

Dr. K Rama Narasimha Principal/Director Dr. K. RAMASIANASIMHA Principal/Director School of Engineering and Management Bengaluru - 560 109

Signature with Date

Name of the Examiners

1 2

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangama, Belagavi-590014



PROJECT REPORT

ON

#### HOME AUTOMATION USING ARDUINO FOR ELDERLY PEOPLE

Submitted in Partial fulfillment of the Requirements for 8th Semester

**Bachelor of Engineering** 

in

**Electronics and Communication Engineering** 

by

A THARUN G ADARSH NAIDU RAJDEEP SAI S 1KG18EC002 1KG19EC032 1KG19EC082

Under the Guidance

of

#### **DILEEP J**

Assistant Professor, Department of ECE, KSSEM

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING K. S. SCHOOL OF ENGINEERING AND MANAGEMENT BENGALURU-560109 2022-23

## K. S. SCHOOL OF ENGINEERING AND MANAGEMENT DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the Project work entitled Home Automation Using Arduino For Elderly People are carried out by A Tharun (1KG18EC002), G Adarsh Naidu(1KG19EC032), Rajdeep Sai S(1KG19EC082), Bonfide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering under Visvesvaraya Technological University, Belgaum during the year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Project report and deposited in the department library. The report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

#### **Internal Guide**

Mr. Dileep J Assistant Professor Dept. of ECE

Head of the Department

Dr. K. Senthil Babu Professor & Head Dept. of ECE

15. Rom

Principal

Dr. K. Rama Narasimha KSSEM

Dr. K. RAMA NARASIMHA Principal/Director K S School of Engineering and Management Bengaluru - 560 109

Signature with Date R

Name of the Examiners 1 Dr Charda V Roddy 2