

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belgavi-590014



PROJECT REPORT

ON

**IMPLEMENTATION OF IOT BASED EARLY FLOOD DETECTION
AND ALARMING**

Submitted in partial fulfillment of the requirements for 8th semester

Bachelor of Engineering

In

ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

KAMPALLI SOHITH

1KG19EC047

KOVI SHARATH CHANDRA

1KG19EC052

THOTA MOHAN BABU

1KG19EC096

V ANIL KUMAR

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

K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE

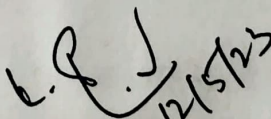
This is to certify that the project work entitled "IMPLEMENTATION OF IOT BASED EARLY FLOOD DETECTION AND ALARMING" are carried out by Kampalli Sohith (1KG19EC047), Kovi Sharthchandra (1KG19EC052), Thota Mohanbabu (1KG19EC062), V. Anilkumar (1KG19EC090), bonafide students of KSSEM in partial fulfillment 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



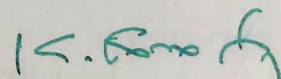
Mrs. Swati Sarkar
Assistant Professor
Dept. of ECE

Head of the Department



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

Principal



Dr. K. Rama Narasimha
Principal/Director
KSSEM

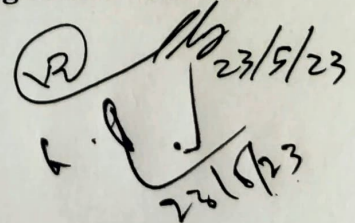
Dr. K. RAMA NARASIMHA
Principal/Director

Professor & Head
Dept. of Electronics & Communication Engineering
K. S. School of Engineering & Management
Bangalore-560 109


Signature with date

Name of the Examiners

1. Dr. Chandra. V. Reddy
2. Dr. K. Senthil Babu.



23/5/23



23/5/23

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG19EC010

DEEPTHI SSHRIE R H

1KG19EC022

GOWTHAMI S

1KG19EC035

SHIVANI K PATIL

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

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

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
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Dr. K. Senthil Babu
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Dr K. Rama Narasimha
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Name of the Examiners

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Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi-590014



PROJECT REPORT

ON

Implementation of Self-Sealing Smart Dustbin using IoT

Submitted in Partial Fulfillment of the Requirements for 8th 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

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

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

Mr. Syed Waseem Tabraiz
Assistant Professor
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Head of the Department

Dr. K. Senthil Babu
Professor & Head
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Principal

Dr. K. Rama Narasimha
Principal/Director
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External Viva

Name of the Examiners

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Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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 8th 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

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

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
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Name of the Examiners

1

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Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

by

KAVYA C

1KG19EC049

KAVYA S E

1KG19EC050

KEERTHANA B R

1KG19EC051

MADAN C B

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

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

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


18/5/23

Dr. K Senthil Babu
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Name of the Examiners

1

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Principal



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

Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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 8th semester

Bachelor of Engineering

In

ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

JETTI BHEEMESH

1KG19EC043

MANAM TEJA

1KG19EC058

MONIKA V G

1KG19EC062

SNEHA B

1KG19EC090

Under the Guidance
of

Mrs. Renuka V Tali

Assistant Professor,

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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 “**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
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Professor & Head
Dept. of ECE

Dr. K. Rama Narasimha
Principal/Director
KSSEM

Name of the Examiners

Signature with date

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2.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JnanaSangama,Belgavi-590014



PROJECT REPORT

ON

DESIGN OF SMART AND SECURE COURIER BOX USING IOT

Submitted in partial fulfillment of the requirements for 8th 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

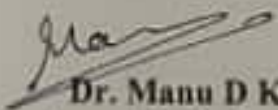
CERTIFICATE

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), Jahnvi 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.

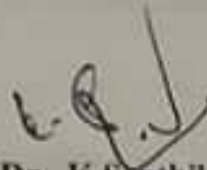
Internal Guide

Head of the Department

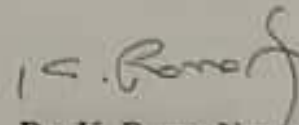
Principal



Dr. Manu D K
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Dept. of ECE



Dr. K Senthil Babu
Professor & Head
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Dr. K. Rama Narasimha
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Dr. K. RAMA NARASIMHA
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Bengaluru - 560 109

Name of the Examiners

Signature with date

1.

2.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG19EC007

DHUREEN L

1KG19EC028

GAGAN SAGAR K M

1KG19EC031

HARISH KAYSHYAP

1KG19EC038

Under the Guidance

of

VIJAYALAXMI KALAL

Assistant Professor,

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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 **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

2

Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG19EC004

C GIRISHMA SAI

1KG19EC016

DHARMAVARAPU PRATHYUSHA

1KG19EC026

MAHESHWARI A. V

1KG18EC031

Under the Guidance

of

Mrs. JAYASHREE G R

Asst. Professor,

Department of ECE, KSSEM

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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 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
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Dr K. Rama Narasimha
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Name of the Examiners

Signature with Date

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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 (1KG19EC008)

BHUVAN S (1KG19EC014)

DHEERAJ M (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

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

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
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Dr.Girish V Attimarad
Head of Department
Dept. of ECE

Dr.K.Rama Narasimha
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Name of the Examiners

Signature with Date

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG19EC041

PAVANI POKURI

1KG19EC071

POOJA A B

1KG19EC072

SIREESHA.R

1KG19EC089

Under the Guidance

of

Prof. Sanjay Nayak

Associate Professor,

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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 **Identification of Leaf Diseases using Neural Networks** are carried out by **Jagarlamudi Kavyasree (1KG19EC041), Pavani Pokuri (1KG19EC071), Pooja A B (1KG19EC072), Sireesha.R (1KG19EC089)**, 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
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Dr. K. Senthil Babu
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Principal/Director
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Name of the Examiners

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Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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 KUMAR

1KG19EC023

LINGUTLA TARUN KUMAR

1KG19EC054

MALAPATI DILEEP

1KG19EC057

MODUPALLI PAVAN KUMAR

1KG19EC060

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

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

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.
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Dept. of ECE

Dr. K. Rama Narasimha
Principal/Director
KSSEM

Name of the Examiners

Signature with Date

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG19EC012

KAKARLA SAI ABHIRAM

1KG19EC046

NAVYA S

1KG19EC065

SURABHI N

1KG19EC094

Under the Guidance

of

Mr. GOPALAKRISHNA MURTHY C R

Assistant Professor,

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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 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

Mr. GopalaKrishna Murthy C R
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Dept. of ECE

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KSSEM

Name of the Examiners

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Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangma, Belagavi-590014



PROJECT REPORT

ON

Design And Fabrication of a Prototype for Knee Rehabilitation

Submitted in Partial fulfillment of the Requirements for 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

by

NIRIKSHA V MURTHY

1KG19EC067

NITHIN L

1KG19EC068

PRAJWAL SK

1KG19EC073

PRATYUSH KUMAR

1KG19EC078

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


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

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

Principal


Dr. K Senthil Babu
Professor & Head
Dept. of ECE, KSSEM
Dept. of Electronics & Communication Engineering
K. S. School of Engineering & Management
Bangalore-560 109
Name of the Examiners
1
2


Dr K. Rama Narasimha
Principal / Director
Dr. K. RAMANARASIMHA
Principal/Director
K S School of Engineering and Management
Bengaluru - 560 109
Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
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 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

By

PRAMOD R

1KG19EC074

RAGHU R

1KG19EC081

SAGAR B T

1KG19EC083

SUDEEP G R

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

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

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

Signature with Date

1

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi-590014



PROJECT REPORT

ON

SMART ELECTRONIC AID FOR VISUALLY IMPAIRED

Submitted in Partial fulfilment of the Requirements for 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

by

R SASIKALA

1KG19EC080

SAICHARITHA Y

1KG19EC084

SHUBHA M

1KG19EC088

SUMA B L

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

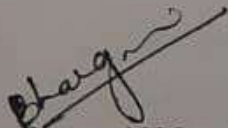
2022-23

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

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

Head of the Department



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

Principal



Dr. K. Rama Narasimha
KSSEM

Dr. K. RAMA NARASIMHA

Principal/Director

K S School of Engineering and Management

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K. S. School of Engineering & Management
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Bangaluru - 560 109
Signature with Date

Name of the Examiners

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG17EC088

BINDHU SHREE R

1KG19EC015

G SATHEESH

1KG19EC030

GOALLA LIKHITHA

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

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

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

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

Dr K. Rama Narasimha
KSSEM

Name of the Examiners

Signature with Date

1

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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

1KG19EC006

CHARITHA P LOGANATHAN

1KG19EC019

HARSHITH KUMAR K M

1KG19EC039

NARRA MAHESH CHANDRA

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

K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

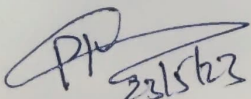
CERTIFICATE

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.

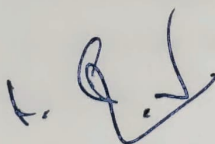
Internal Guide

Head of the Department

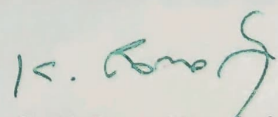
Principal



Dr. Karthik P
Professor,
Dept. of ECE



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



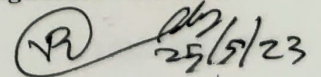
Dr K. Rama Narasimha
Principal/Director,

KSSEM
Dr. K. RAMA NARASIMHA
Principal/Director

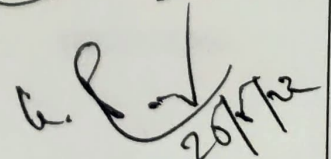
Name of the Examiners

- 1 Dr. Chavda, V. Reddy
- 2 Dr. K. Senthil Babu

Signature With Date



25/5/23



26/5/23

Dept. of Electronics & Communication Engineering
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K. S. School of Engineering and Management
Bangalore - 560 109

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

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

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
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Dr K. Rama Narasimha
KSSEM

Name of the Examiners

Signature with Date

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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

1KG19EC059

PRATHYUSHA

1KG19EC077

SHREE RAKSHA H

1KG19EC087

STEFFI K THOMAS

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

Mrs. Deepa R Bhangi
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Dr K. Rama Narasimha
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Name of the Examiners

1

2

Signature with Date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

by

AMRIT SARKAR

1KG19EC002

P. DIVAKAR

1KG19EC069

R. J. YASWANTH

1KG19EC079

TOWQEER MADNI

1KG19EC097

Under the Guidance

of

Mr. RAVIKIRAN B A

Asst. Professor,

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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

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangam, Belagavi-590014



PROJECT REPORT

ON

EMBEDDED BASED VEHICLE THEFT DETECTION

Submitted in Partial fulfilment of the Requirements for 8th 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

K. Shome
16/5/23
Dr. Kishore M
Asst. Professor
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Head of the Department

K. S. Senthil Babu
Dr. K Senthil Babu
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K. S. School of Engineering & Management
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Dr. K. Rama Narasimha
Principal & Director
KSSEM
Dr. K. RAMA NARASIMHA
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K S School of Engineering and Management
Bengaluru - 560 109

Name of the Examiners

- 1 *Dr. Chandra V. Reddy*
- 2 *Dr. K. Senthil Babu*

Signature with Date

Chandra V. Reddy
25/5/23
K. S. Senthil Babu
25/5/23

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi-590014



PROJECT REPORT ON

SMART HELMET

Submitted in Partial fulfillment of the Requirements for 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

by

LOKESH BABU B

1KG19EC009

YASWANTH D

1KG19EC021

SANTOSH KUMAR B

1KG19EC086

HARISH T

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 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

Principal




Dr K. Rama Narasimha
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Principal/Director
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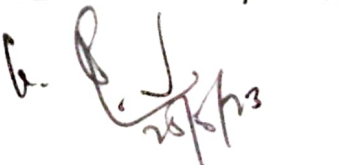
Name of the Examiners

- 1 Dr. Chanda. V. Reddy
- 2 Dr. K. Senthil Babu.

Signature with Date



25/5/23



25/5/23

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi-590014



PROJECT REPORT

ON

SMART SHOPPING TROLLEY WITH AUTOMATED BILLING

Submitted in Partial fulfilment of the Requirements for 8th Semester

Bachelor of Engineering

in

Electronics and Communication Engineering

by

AAFIYA KULSOOM

1KG19EC001

BHAGYALAKSHMI JH

1KG19EC011

BHAVANA S

1KG19EC013

KARUNA S

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

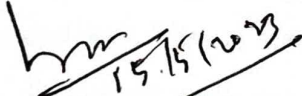
K.S SCHOOL OF ENGINEERING AND MANAGEMENT

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

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Principal



Dr. K Rama Narasimha
Principal/Director

Dr. K. RAMANARASIMHA
Principal/Director
K.S.S.E.M.
K.S. School of Engineering and Management
Bangaluru - 560 109

Name of the Examiners

1

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Signature with Date

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

1KG18EC002

G ADARSH NAIDU

1KG19EC032

RAJDEEP SAI S

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

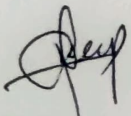
2022-23

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

CERTIFICATE

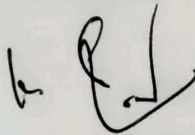
This is to certify that the Project work entitled **Home Automation Using Arduino For Elderly People** are carried out by **A Tharun (1KG18EC002), G Adarsh Naidu(1KG19EC032), Rajdeep Sai S(1KG19EC082)**, Bonfide students of KSSEM in partial fulfillment for the award of Bachelor of Engineering in Electronics 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

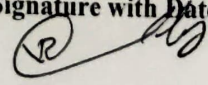
Principal



Dr. K. Rama Narasimha
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Bengaluru - 560 109

Signature with Date



Name of the Examiners

1 Dr Chanda V Reddy

2