



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled "Design of wide band low noise amplifier using Advanced Design System (ADS)" submitted by

P. Susmith	1602-21-735-051
R. Vinai	1602-21-735-060
S. Rohith Reddy	1602-21-735-031

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

Dr. Sri Lakshmi Aouthu

Associate Professor

E.C.E Department

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

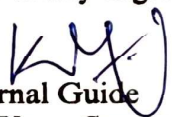
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IBRAHIMBAGH, HYDERABAD-500031


CERTIFICATE


This is to certify that the project seminar report titled “*Identification of Aromatic Coconuts Using Image Processing and Machine Learning Techniques*” s u b m i t t e d by

Harshitha Konakanchi	1602-21-735-014
Shravani Vundavilli	1602-21-735-045
Dheeraj Bolla	1602-21-735-011

students of the Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Internal Guide
Dr. K. Veera Swamy
Professor
E.C.E Department


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

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IBRAHIMBAGH, HYDERABAD - 500031

CERTIFICATE

This is to certify that the Major Project work titled
“AUTOMATED BABY MONITORING SYSTEM WITH
DEEP LEARNING” submitted by

BY

M. VAISHNAVI

1602-21-735-056

G. ESHWAR

1602-21-735-012

B. SOWMYA

1602-21-735-048

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree

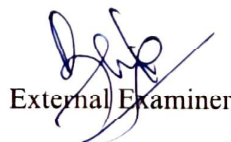


Internal Guide

Dr. K. Deepthi, M.Tech, Ph.D.
Associate Professor
E. C. E Department



Head of the Department
Dr. E. Sreenivasa Rao
Professor & HoD
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External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “Exponential variant of GMCC algorithm for noise and feedback cancellation in Hearing Aids” submitted by

Mansi Talla

1602-21-735-020

Rushindra Kandi

1602-21-735-035

Sai Praveen Reddy

1602-21-735-039

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
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Ms. Ch. Neetu Narayan Rao
Assistant Professor
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External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “Wi-Fi CSI based Human Activity Recognition using ESP32” submitted by

P.Keerthana

1602-21-735-017

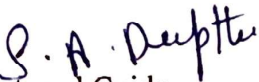
K.Lakshmi Samhitha

1602-21-735-018

B.Anoohya

1602-21-735-005

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Internal Guide

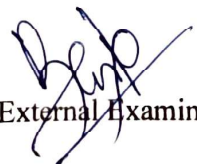
Dr. S. Aruna Deepthi

Assistant Professor
E.C.E Department



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Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD - 500031

CERTIFICATE

This is to certify that the Mini Project work titled "DESIGN OF A TWO-STAGE OPERATIONAL TRANSCONDUCTANCE AMPLIFIER (OTA)"
submitted by

BY

SANKAR PODURI

1602-21-735-041

SHAIK MUNNA

1602-21-735-044

RAHUL PRAHALADHA


1602-21-735-307

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

**Mr. K. Rama Krishna Reddy,
M.Tech, Assistant Professor
E. C. E Department**


External Examiner


**Head of the Department
Dr. E. Sreenivasa Rao
Professor & HoD
E. C. E Department**



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Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled “**Design and Analysis of Srichakra-shaped Microstrip Fractal Antenna**” submitted by

P. Ramya

1602-21-735-302

T. Venkata Hari Chandana

1602-21-735-058

M. Ujwala

1602-21-735-053

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

Dr. Srinakshmi Aouthu

Associate Professor

E.C.E Department

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

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External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that project titled “Event-based Video Reconstruction using Transformer” submitted by

P. Saideep Reddy

1602-21-735-040

S. Abhiram Goud

1602-21-735-305

D. Preetham Goud

1602-21-735-029

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
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Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the project seminar report titled “**A Deepfake Detection Dataset With Deepfake Detection Algorithms**” submitted by

G.Vaishnavi

1602-21-735-055

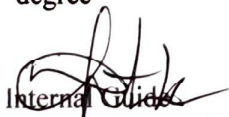
K.Mounika

1602-21-735-303

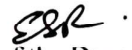
Adi Lakshmi

1602-21-735-001

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
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Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled **“IMPLEMENTATION OF SRAM CELL WITH BETTER READ AND WRITE STABILITY WITH MINIMUM AREA”** submitted by

E. Sai Nikhitha

1602-21-735-038

P. Shruthi

1602-21-735-046

CH. Ashwini

1602-21-735-006

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Mr. MD. HAFIZUDDIN

Assistant Professor
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Head of the Department

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External Examiner



Department of Electronics and Communication Engineering
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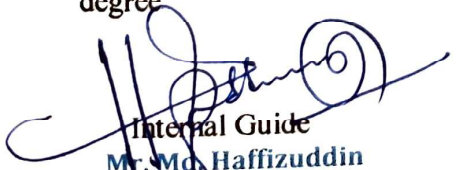
This is to certify that the Project work titled "**Implementation of Energy Efficient BIST Architecture by using Verilog HDL**" submitted by


Ch. Nachiketh 1602-21-735-021

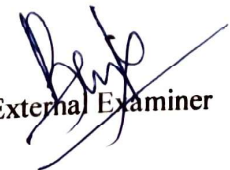
G. Vineel 1602-21-735-061

Ch. Paavandeep 1602-21-735-024

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Mr. Md. Haffizuddin
Assistant Professor
E.C.E Department


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner

Implementation and Analysis of High-Speed Adders

Project Seminar Report submitted in partial fulfillment of the academic
requirement for the award of the degree of
BACHELOR OF ENGINEERING

In
ELECTRONICS AND COMMUNICATION ENGINEERING

By

A.N.S Kartikeya	1602-21-735-301
A.Srimanikrishna	1602-21-735-049
V.Yashwanth	1602-21-735-062

Under the guidance of
Mr. B. Srinivas Rao
Assistant Professor, E.C.E



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

2024-2025



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Implementation and Analysis of High-Speed Adders**” submitted by

A.N.S Kartikeya

1602-21-735-301


A.Srimanikrishna


1602-21-735-049

V.Yashwanth

1602-21-735-062

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Mr. B. Srinivas Rao
Assistant Professor
E.C.E Department


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled “**Exploring potentiality of LSTM using demand forecasting and video pattern prediction**” submitted by

Uma Maheshwar

1602-21-735-054

Vignesh

1602-21-735-059

Chanikya

1602-21-735-009

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafied work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

Mr. Uma Mahesh Babu

Assistant professor

E.C.E Department

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

External Examiner



Department of ECE,
Vasavi College of Engineering
ACCREDITED BY NAAC WITH 'A++' GRADE
Ibrahim Bagh, Hyderabad-50072

CERTIFICATE

This is to certify that the project work titled **“IMPLEMENTATION OF ADC DRIVER FOR SECURE DATA LOGGING IN ARM CORTEX M4F BASED MICROCONTROLLER”** submitted by

Maanasa Pamarthy

1602-21-735-019

Rushikesh Karupothula

1602-21-735-034

Varshita B

1602-21-735-057

students of Electronics and Communication Engineering department, Vasavi College of Engineering and partial fulfillment of the requirement for the award of the degree Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024 to 2025. The result embodied in this project has not been submitted to any other university or institute for the award of any degree.

Internal Guide

Dr. N. Abid Ali Khan
Assistant Professor
Department of ECE

Head of the Department
Dr. E. Sreenivasa Rao
HoD & Professor
Department of ECE

External Examiner



Department of Electronics and Communication Engineering Vasavi College of
Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled “ Image to Image conversion using Generative Adversarial Networks” submitted by

Y.Hemantha Jawahar

1602-21-735-015

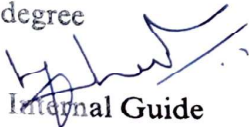
G.Yogendra

1602-21-735-063

M.Tarun Sai

1602-21-735-052

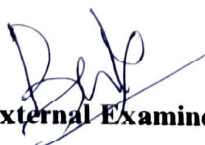
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

B.Uma Mahesh Babu
Assistant Professor
E.C.E Department


Head of the Department

Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: ~

CERTIFICATE

This is to certify that the project work titled “ **Detection of SAHS and Cardiac Arrhythmia using Machine Learning and user interface using Stream lit Web Application**” submitted by

Anjali Mulka

1602-21-735-004

Farhaan Abdul Wahab

1602-21-735-013

N Prajna Gayathri

1602-21-735-025

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2022-2023. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Mrs A B N P Sirisha

Assistant Professor


E.C.E Department


Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the project work titled “**Design and Implementation of Single and Dual-System Voice Trans-reception and Binary gender Classification Using SDR**” submitted by

Aditya Das

1602-21-735-002

Velmakanti Sathwik

1602-21-735-042

Yogesh Kumar Mishra

1602-21-735-064

students of Electronics and Communication Engineering Department, Vasavi College of Engineering, in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering, is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

Dr. Srilakshmi Aouthu

Associate Professor

E.C.E Department

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

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Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031


Date:01-05-2025


CERTIFICATE

This is to certify that the Project work titled “ **Machine Learning based Border Security System with GSM Integration**” submitted by

Rangineni Sathwika	1602-21-735-043
Krishnajigari Akhila	1602-21-735-003
Begari Nikhila	1602-21-735-023
A.Praveen Kumar Varma	1602-21-735-028

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Dr. Srilakshmi Aouthu
Associate Professor
E.C.E Department


Head of the department
Name: **Dr. E. SREENIVASA RAO**
Professor and HOD
E.C.E Department


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Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “**Implementation of Intrusion Detection and Prevention system in Cloud Computing Platform**” submitted by

C. Bharath Reddy

1602-21-735-007


P. Krishna Sai Vikas


1602-21-735-306

B. Bhupathi Reddy

1602-21-735-008

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Ms. V. Aruna
Assistant Professor
E.C.E Department


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**Department of Electronics and Communication Engineering Vasavi
College of Engineering (Autonomous)**

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IBRAHIMBAGH, HYDERABAD-500031


Date: 01/05/2025


CERTIFICATE


This is to certify that the project seminar report titled “**Design and Analysis of Metamaterial Absorber for Radar and Imaging Applications**” submitted by

A.Pranay	1602-21-735-026
V.Ronith	1602-21-735-032
B.Naveen	1602-21-735-022

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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Dr. Srilakshmi Aouthu
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IBRAHIMBAGH, HYDERABAD-500031


Date:


CERTIFICATE

This is to certify that the project seminar report titled “**Implementation of Low Power and Fast Full Adder by optimizing XOR and XNOR gates**” submitted by

Y. SAHITHYA	1602-21-735-036
K. ROOPA SHARANYA	1602-21-735-033
J. SOUMIKA	1602-21-735-047

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Internal Guide
Mr. H. Shravan Kumar
Assistant Professor
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Professor and HOD
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External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “**Verification of AXI DMA Controller**”
submitted by

V B DHANWANTH RAO

1602-21-735-010

NIKHILA ANANTOJI

1602-21-735-304

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide
V. KRISHNA MOHAN
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Date:

CERTIFICATE

This is to certify that the project work titled “**Design of Star Tracker Using STM32-H7 For CubeSat Applications**” submitted by

Lanka Hithesh Karthikeya

1602-21-735-016

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

V. Krishna Mohan

Internal Guide

V.Krishna Mohan

Asistant Professor

E.C.E Department

[Signature]
External Examiner

[Signature]

Head of the Department

Dr.E. SREENIVASA RAO

Professor and HOD

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Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date: 25/4/2025

CERTIFICATE

This is to certify that the Project work titled “**ASSESSMENT OF COLLATERAL PERFORMANCE OF I&C PRODUCT MARKETING TEAM USING SEISMIC DATA ANALYTICS**” submitted by

SAI ANANYA TUNGATURTHI

1602-21-735-037

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide
Mr. Uma Mahesh Babu
Assistant Professor
E.C.E Department

Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

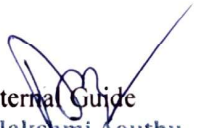
This is to certify that the Project work titled “**DESIGN AND ANALYSIS OF GROUND PENETRATING RADAR USING FINITE DIFFERENCE TIME DOMAIN METHOD (FDTD)**” submitted


BY

VADLAGERI SUDHEENDRA REDDY

1602-21-735-050

student of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Internal Guide
Dr. Srilakshmi Aouthu
Associate Professor
E.C.E Department


Head of the Department
Dr. E. Sreenivasa Rao
Professor & HoD
E.C.E Department


External Examiner



20 April 2025

Certificate of Internship Project Completion

This is to certify that **Nikhila Anantoji** (Vasavi College of Engineering 1602-21-735-304) has interned with us during the period January 2025 – April 2025 and has successfully completed his internship project with the **Design Verification Team** at Vaaluka Solutions Private Limited.

During the course of the internship, Nikhila worked on the project titled:
“Verification of AXI DMA Controller.”

Her work involved verifying the AXI DMA by debugging and analyzing UVM testbenches. She focused on understanding the structure and flow of the UVM environment, including sequences, drivers, monitors, and scoreboards. The outcomes of this project deepened her knowledge of System Verilog-based verification methodologies and contributed to improving the reliability and functional accuracy of the AXI DMA design.

We appreciate her efforts throughout the engagement.

Sree Ram Nimmagadda

HR Manager

Vaaluka Solutions Private Limited

Date: 13th April 2025

Location: Madhapur, Hyderabad

CERTIFICATE OF INTERNSHIP PROJECT COMPLETION

This is to certify that **Vadlageri Sudheendra Reddy**, a student of **Vasavi College of Engineering**, bearing Roll.no **1602-21-735-050**, completed his internship at Constelli Signals from 6th January 2025 to 12th April 2025 as part of his academic internship program.

During the course of the internship, he has demonstrated keen interest and active participation in the assigned project. He has been involved in the internship project **Design and Analysis of Ground-Penetrating Radar using Finite-Difference Time Domain (FDTD)**, and has shown commendable learning ability and dedication to his work.

His work involved designing and simulating a Ground Penetrating Radar (GPR) system using the Finite-Difference Time-Domain (FDTD) method. He analyzed B scan images for different target scenarios by varying the size, shape, and material properties such as permittivity and conductivity. This helped in understanding how these factors affect the detection and resolution of subsurface targets. The results of the project contributed to better interpretation of GPR data and improvements in subsurface imaging techniques.


MAHESH KUMAR MADDURI
SR. SYSTEMS ENGINEER - RADAR
CONSTELLI SIGNALS PRIVATE LIMITED



CONSTELLI SIGNALS PRIVATE LIMITED

GSTIN : 36AAHCC2801K1ZS
PAN : AAHCC2801K
CIN : U31100TG2017PTC120616
Website : constelli.com

5th Floor, DGS Prime, Siddhi Vinayak Nagar,
Madhapur, Hyderabad, Telangana, India - 500081
Ph : +040 48533841 | FAX : 040 - 48533842



Certificate of Internship Project Completion

This is to certify that **Sai Ananya Tungaturthi** (**Vasavi College of Engineering – 1602-21-735-037**) has interned with us during the period January 2025 – April 2025 and has successfully completed her internship project with the **I&C Product Marketing Team** at Silicon Labs.

During the course of the internship, Ananya worked under my guidance on the project titled:

“Assessment of Collateral Performance of I&C Product Marketing Team Using Seismic Data Analytics.”

Her work involved developing customized Seismic dashboards, analyzing global engagement metrics, and generating insights to inform marketing content strategy. The outputs of this project supported cross-regional enablement efforts and contributed to improved content decision-making within the team.

We appreciate her efforts throughout the engagement.

Chad Steider

Chad Steider

Senior Product Marketing Manager

I&C Product Marketing | Silicon Labs

Date: 20th April 2025

Location: Indianapolis, IN



GIMBAL SPACE INDIA PRIVATE LIMITED
F-2, 1ST FLOOR, BSR RAI PARK VIEW,
167, 13TH MAIN ROAD, COFFEE BOARD LAYOUT,
HEBBAL KEMPAPURA, BENGALURU - 560 024

Subject: Project Certificate for L. Hitesh Karthikeya

To whom it may concern:

This is to certify that L. Hithesh Karthikeya bearing hall ticket no.1602-21-735-016 has worked with Gimbal Space India Private Limited on the project " Novel design of star tracker for CubeSat applications", and has demonstrated results to the team and met his objectives.

With Regards,

GIMBAL SPACE INDIA PRIVATE LIMITED

Dhaval Shiyani

✓ Sign I D:acbf63 72

(Signature)

Name: Dhaval Shiyani

Title: Director & CEO

Date: 14 April,2025



VAALUKA

20 April 2025


Certificate of Internship Project Completion

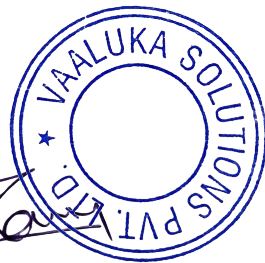
This is to certify that **Dhanwanth Rao V B** (Vasavi College of Engineering 1602-21-735-010) has interned with us during the period January 2025 – April 2025 and has successfully completed his internship project with the **Design Verification Team** at Vaaluka Solutions Private Limited.

During the course of the internship, Dhanwanth worked on the project titled:
“Verification of AXI DMA Controller.”

His work involved verifying the AXI DMA by debugging and analyzing UVM testbenches. He focused on understanding the structure and flow of the UVM environment, including sequences, drivers, monitors, and scoreboards. The outcomes of this project deepened his knowledge of System Verilog-based verification methodologies and contributed to improving the reliability and functional accuracy of the AXI DMA design.

We appreciate his efforts throughout the engagement.


Sree Ram Nimmagadda
HR Manager
Vaaluka Solutions





Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Major project report titled “**Design and Implementation of LFSR for Built-in Deterministic Test Pattern Generation**” submitted by

D. Varsha Reddy

1602-21-735-125

K. P. Sai Swetha

1602-21-735-109

M. Navya

1602-21-735-087

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Internal Guide

Mr. H Shravan Kumar, M. Tech

Assistant Professor

E.C.E Department

Head of the Department

Dr. E. SREENIVASA RAO, M. Tech, Ph.D

Professor and HOD

E.C.E Department

External Examiner

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:17/04/2025

CERTIFICATE

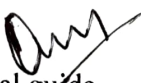
This is to certify that the project seminar report titled “**Design and Implementation of Low Noise Amplifier Using Cadence Virtuoso**” submitted by


Salma Anjum 1602-21-735-110

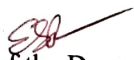
B. Sanjay 1602-21-735-111

P. Shivakalyan Gupta 1602-21-735-115

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal guide
K. Ramakrishna Reddy
Assistant Professor
E.C.E Department


External Examiner


Head of the Department
Dr. E. Sreenivasa Rao
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “Heterogenous Hardware Acceleration Methodology on FPGA using High Level Synthesis” submitted by

M Sai Charan

1602-21-735-104

M Sai Shanmukha Keerthana

1602-21-735-107

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

G. R. Padmini

Internal Guide

Ms. G.R.Padmini

Associate Professor

E.C.E Department

[Signature]

External Examiner

[Signature]

Head of the Department

Dr. E.SREENIVASA RAO

Professor and HOD

E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 081.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date: 24/04/2025

CERTIFICATE

This is to certify that the project seminar report titled “An Enhanced Image Fusion Algorithm by Combined Histogram Equalization and Fast Gray Level Grouping Using Multi-Scale Decomposition and Gray-PCA” submitted by

D. Dinesh Kumar

1602-21-735-074


G. Harshitha


1602-21-735-076

D. Priyanka

1602-21-735-092

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Internal Guide
Dr. R. Leelavathi, M. Tech, Ph.D.
Assistant Professor
E.C.E Department


Head of the Department
Dr. E. SREENIVASA RAO, M. Tech, Ph.D.
Professor and HOD
E.C.E Department

External Examiner

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**Department of Electronics and Communication Engineering Vasavi
College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:30-04-2025

CERTIFICATE

This is to certify that the project seminar report titled “**A Novel Method for Testing and Repairing of Digital Circuits Using Redundancy Mechanism**” submitted by

Mukesh Artham

1602-21-735-085


Nikhil Dubbula

1602-21-735-088


Satwik Chitmilla

1602-21-735-114

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Mr.Md.Hafizuddin
Assistant Professor
E.C.E Department


External Examiner


Head of the Department
Dr.E.SREENIVASA RAO
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:30/04/2025

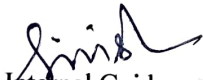
CERTIFICATE


This is to certify that the project seminar report titled “Location Monitoring for Sailboats using GPS and GSM Technology” submitted by


Abhijeeth Manakan
Mohammed Raqibuddin
Pranav Kumar Gatla

1602-21-735-065
1602-21-735-083
1602-21-735-091

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Mrs.A.B.N.P.Sirisha,M.E
Assistant Professor
E.C.E Department


External Examiner


Head of the Department
Dr .E.SREENIVASA RAO, M.Tech,Ph.D.
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD 500031

Date:

CERTIFICATE

This is to certify that the Project work titled “**Machine Learning Techniques for Classifying the Sweetness of Watermelon using Acoustic Signal and Image Processing**” submitted by

SUNKARI RAJANEESH

1602-21-735-095


PAVUSHETTI REVANTH


1602-21-735-097


SAGARLA MAHALAXMI

1602-21-735-082

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Dr. KILARI VEERA SWAMY
Professor
E.C.E Department


External Examiner


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.



Vasavi College of Engineering (Autonomous)

Department of Electronics and Communication Engineering

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled " **Predictive Analytics with Machine Learning for Fraud Detection of Online Marketing Transactions** " submitted by

P.V.N.S GANESH 1602-21-735-086

UPPU RUTHVIKA 1602-21-735-102

GILLA RISHITH 1602-21-735-099

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Ms. ARUNA VALASA

Assistant Professor

E.C.E Department


External Examiner


Head of the Department

Dr. E. SREENIVAS RAO

Professor and HOD

E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.**



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 30-04-2025

CERTIFICATE

This is to certify that the project seminar report titled "A Progressive Neural Network For Acoustic Echo Cancellation" submitted by

K. Arun Reddy 1602-21-735-072

M. Karthik 1602-21-735-078

T. Sri Vasthava 1602-21-735-118

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Internal Guide

Ch. Neetu

Assistant Professor

E.C.E Department

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

External Examiner

PROF. & HEAD
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HYDERABAD 500 031



**Department of Electronics and Communication
Engineering Vasavi College of Engineering
(Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Deep-Learning Based Audio-Visual Speech Enhancement and Separation**” submitted by,

K. Akash 1602-21-735-067

G.V. Akshit Kumar Reddy 1602-21-735-070

A. Shiva Kumar 1602-21-735-116

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Internal Guide
Mr. M. Prasanth.
Assistant Professor
E.C.E Department

Head of the Department
Hon. Dr. E. SREENIVASA RAO.
Professor and HOD
E.C.E Department

External Examiner

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**



Department of Electronics and Communication
Engineering Vasavi College of Engineering
(Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Major Project report titled “UltraWide Band Communication using Hybrid Matched Filter Correlation Receivers ” submitted by

Y.Divya	1602-21-735-075
K.Dikshitha	1602-21-735-309
B.Purnima	1602-21-735-094

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Examiner

Ms.K.R.Deepthi

Assistant Professor

E.C.E Department

Head of the Department

Dr.E.SREENIVAS RAO

Professor and HOD

E.C.E Department

External Examiner

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “Circularly polarized printed MIMO strip antenna for WIFI-applications” submitted by

P. Jaswanth

1602-21-735-077

V. Venkat Reddy

1602-21-735-126

CH. Venkata Devarshi

1602-21-735-127

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

Mr. P. Bhargava

Assistant Professor

E.C.E Department

External Examiner

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGINEERING
HYDERABAD**



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Design and implementation of AXI Lite Redundant On-Chip Bus Interconnect for High Reliability Systems**” submitted by

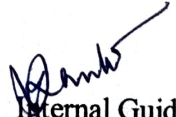
Abhishek Reddy Palla
N Mukesh
Tejasri Vadlakonda

1602-21-735-311
1602-21-735-312
1602-20-735-113


students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Head of the Department

Dr. E. SREENIVASA RAO, M. Tech, Ph.D.
Professor and HOD
E.C.E Department


Internal Guide

K. Srikanth, M. Tech, (Ph.D.)
Assistant Professor
E.C.E Department


External Examiner

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.



**Department of Electronics and Communication
Engineering Vasavi College of Engineering
(Autonomous)**

**ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031**

Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Deep Learning-
Based Human Activity Recognition using CNN, ConvLSTM**” submitted by

M.Nithin

1602-21-735-089

K.Ravinder Reddy

1602-21-735-096


U.Rishi

1602-21-735-098

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Dr. S. Aruna Deepthi
Assistant Professor
E.C.E Department


External Examiner


Head of the Department

Dr. E. SREENIVASA RAO,
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.**



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Web Application for Food Waste Reduction**” submitted by

Boppidi Sai Sharanya

1602-21-735-108

Pendekanti Yashash Anirudh

1602-21-735-130


P. Sandhya


1602-19-735-102

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Mr. B. Srinivas Rao
Assistant Professor
E.C.E Department


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:30-04-2025

CERTIFICATE

This is to certify that the Project work titled “**Cascode Cross-Coupled High-Speed Dynamic Comparator in 45nm CMOS in comparison with 65nm and 90nm**” submitted by.

M. Pragathi

1602-21-735-090

A. Sushma Prashali

1602-21-735-310

B. Ruth Gladys


1602-21-735-101


students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Mr. K. Rama Krishna

Assistant Professor
E.C.E Department


External Examiner


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.



**Department of Electronics and Communication Engineering Vasavi
College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project report titled “**Image-level oversampling for imbalanced datasets of manufacturing defects**” submitted by

S. Chaitanya Sai

1602-21-735-073

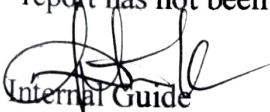
K. Sushanth


1602-21-735-121


J. Sathwik

1602-21-735-113

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Dr. K. Deepti
Associate Professor
E.C.E Department


External Examiner


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.**



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled "Implement a Cognitive Radio System for dynamic Spectrum Sensing Using Software Defined Radio (SDR) - Universal Software Radio Peripheral (USRP)"

submitted by

D.VARSHA

1602-21-735-124

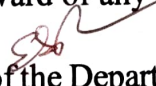
P.SWETHA

1602-21-735-122

N.SATHVIKA


1602-21-735-314

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 081.


External Examiner


Internal Guide
K.R. DEEPTHI
Assistant professor
E.C.E Department

PROF. & HEAD
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HYDERABAD-500 081.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled **"VIDEO CLASSIFICATION USING DEEPLARNING"** submitted by


T Akshar Manoooya	1602-21-735-069
VSN Kireeti	1602-21-735-119
P. Surya Sandeep	1602-21-735-120

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

Mr.B Uma Mahesh Babu , M.Tech. (Ph.D).
Assistant Professor
Department of ECE


External Examiner


Head of Department
Dr. E Sreenivasa Rao
Professor and HoD
Department of ECE

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “Performance Analysis of Network-on-Chip Router Architectures” submitted by

J.M.N Manikanta

1602-21-735-084

Rohan Beri

1602-21-735-100

L. Sashikanth

1602-21-735-112

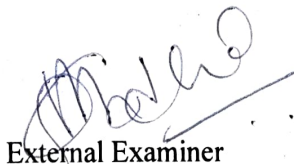
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree



Internal Guide
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department



Head of the Department
Dr. E. SREENIVASA RAO, M. Tech, PhD
Professor and HOD
E.C.E Department


External Examiner

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HYDERABAD-500 031.



**Department of Electronics and Communication Engineering Vasavi
College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 26-04-25

CERTIFICATE

This is to certify that the project seminar report titled “Asynchronous Event- Triggered Interface Driver for ARM CortexM4F in FreeRTOS™” submitted by

Sai Charan Reddy

1602-21-735-105

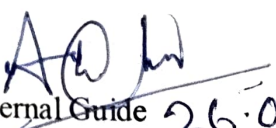
Kaushik.A

1602-21-735-079


Prudhviraaj.G

1602-21-735-093

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Dr.N.Abid Ali Khan
Assistant Professor
E.C.E Department


External Examiner


Head of the Department
Dr . E.SREENIVASA RAO
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 30.04.2025

CERTIFICATE

This is to certify that the project seminar report titled “**Wide Band Circularly Polarized Metasurface Microstrip Antenna for Wireless Applications**” submitted by

H.Vyshnavi

1602-21-735-129

U.Vandana

1602-21-735-308

A.Z.Kamli Thomas

1602-20-735-075

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Internal Guide
Dr.D.M.K.Chaitanya
Associate Professor
E.C.E Department

External Examiner

Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
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HYDERABAD-500 031.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031


Date:

CERTIFICATE


This is to certify that the Project work titled "A Comprehensive Method for Test Pattern Generation Utilizing ATPG and Ensuring High Fault Coverage for Stuck-At-Faults." submitted by

Ayyagari Annapurna Naga Mahesree 1602-21-735-071

student of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide
Name: Ms. G.R.Padmini
Associate Professor
E.C.E Department

External Examiner


Head of the Department
Dr.E.SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
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HYDERABAD-500 031.



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “AXI4 Interconnect Verification using Universal Verification Methodology” submitted by

S. Keerthi Sree

1602-21-735-081

G. Sri Ganga Pranav

1602-21-735-117

B. Siri Harshitha

1602-21-735-313

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

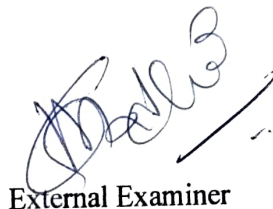



Internal Guide

V. Krishna Mohan

Assistant Professor

E.C.E Department


External Examiner


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

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HYDERABAD-500 031.



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled " **Feature Extraction for Fashion Outfit Generator using Neural Networks**" submitted by

MAREDDY AASRITH REDDY

1602-21-735-133

GURRAM NITHISH REDDY

1602-21-735-161

GUDAVALLI TEJA

1602-21-735-181

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


SUPERVISOR

B. UMA MAHESH BABU

Assistant Professor

E.C.E Department

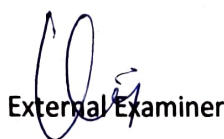


Head of the Department

Dr.E. SREENIVASA RAO

Professor and HOD

E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled "Design And Implementation Of Reliable And High Speed 6t Compute SRAM Design With Dual Speed Split VDD Assist And Bitline Leakage Compensation" submitted by

D.VANDANA

1602-21-735-186

J.POOJA

1602-21-735-318

B.JYOTHI

1602-21-735-146

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Supervisor

K.Ramakrishna

Assistant Professor

ECE Department


Head Of The Department

Dr.E. Sreenivasa Rao

Professor and HoD

ECE Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled "Design of Low Power D Flip Flop" submitted by

AKHILESH KOMMINENI

1602-21-735-136

NENAVATH DEVANAND

1602-21-735-142

GUNDAMOLLA SAI PRANEETH

1602-21-735-169

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


SUPERVISOR

K. RAMA KRISHNA

Assistant Professor

E.C.E Department


Head of the Department

Dr .E. SREENIVASA RAO

Professor and HOD

E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled "Text based Multi-class Hate speech Detection for Social Media Integrity" submitted by

K SAI SRI VARSHITHA

1602-21-735-172

K SHARATH CHANDRA

1602-21-735-176

V MAHESHWARI

1602-21-735-158

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

Mr. M. Prasanth

Assistant Professor

ECE Department

Head Of The Department

Hon. Dr.E. Sreenivasa Rao

Professor and HoD

ECE Department

External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “**Low-Power, High-Speed, and Area-Efficient Multiplier Based on the Pass Transistor Logic** ” submitted by

M.Chandrika

1602-21-735-317

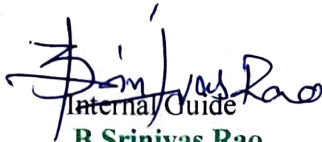
Mehrunissa Begum

1602-21-735-320


Sk.Gousia Begum

1602-21-735-144

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

B.Srinivas Rao
Assistant Professor
E.C.E Department


Head of the Department
Dr . E.SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Implementation of Cyber-Attack Detection Using Autoencoders – A Machine Learning Technique**” submitted by

P. Varun Reddy

1602-21-735-189


Fahad Ali Khan


1602-21-735-143

G. Rohith Reddy

1602-21-735-166

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Internal Guide
Dr. R. Leelavathi, M. Tech, Ph.D.
Assistant Professor
E.C.E Department


Head of the Department
Dr. E. SREENIVASA RAO, M. Tech, Ph.D.
Professor and HOD
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
VASAVI COLLEGE OF ENGINEERING (Autonomous)
ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Major project work titled **“NEW CONSTRUCTIONS OF GIRTH-8 QC-LDPC CODES FOR FUTURE GNSS”** submitted by

GOGADA ABHISHEK	1602-21-735-135
KOUSHIK INDRA GANDI	1602-21-735-151
D N SAI SRI HARSHA	1602-21-735-171

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this major project report has not been submitted to any other university or institute for the award of any degree.

Internal Guide
Dr. Vibha Kulkarni
Assistant Professor,
ECE Department

Head of the Department
Dr. E Srinivas Rao
Professor & HOD
ECE Department

External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 30/04/2025

CERTIFICATE

This is to certify that the project work titled " **Performance Analysis of Energy Efficient MAC Unit for Digital Applications** " submitted by

MARAMREDDY RAJA MOHAN REDDY	1602-21-735-164
PEDDAKAPU PREETHAM	1602-21-735-163
RISHIKA BAJAJ	1602-21-735-165

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


SUPERVISOR

Ms. SAJJANAPU JHANSI NAGA LAXMI

Assistant Professor


E.C.E Department


HEAD OF THE DEPARTMENT

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department


External Examiner



Department of Electronics and Communication Engineering Vasavi

College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 30.04.2025

CERTIFICATE

This is to certify that the Major project work titled “3D Antenna Characterization” submitted by

Muskula Ruthwika

1602-21-735-167

Gaddam Sainadh

1602-21-735-173

Namile Sridhar

1602-21-735-179

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this major project report has not been submitted to any other university or institute for the award of any degree

Internal Guide
Dr.D.M.K.Chaitanya
Associate Professor
E.C.E Department

Head of the Department
Dr. E. SREENIVASA RAO
Professor & HoD
E.C.E Department

External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled " **Adaptive Beamforming using Null Steering and Deep Learning**" submitted by

BAGALAKOT VIKAS

1602-21-735-192

BOGA SAI GANESH

1602-21-735-316

CHENAGALA SAIHARIESH

1602-21-735-319

Students of the Electronics and Communication Engineering Department, Vasavi College of Engineering, in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering, present a record of the bona fide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


SUPERVISOR

Dr. K. VEERA SWAMY

Professor


E.C.E Department


Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031


Date:

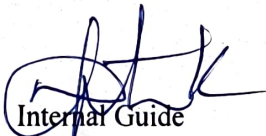
CERTIFICATE


This is to certify that the Project work titled “**Integrating LangChain and Hugging Face for Automated Silicon Wafer Defect Detection**” submitted by

Kriti Anchalia	1602-21-735-137
S. V. S. S. Kousik	1602-21-735-190
T. Sai Charan	1602-20-735-153
R. Vamsi Krishna	1602-20-735-176

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Dr . E.SREENIVASA RAO
Professor and HOD
E.C.E Department


Internal Guide
Dr. K. Deepti
Associate Professor,
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:01-05-2025

CERTIFICATE


This is to certify that the Project work titled “**Design and Implementation of Multi Stage Ring Oscillator using Fast Carry Chains on FPGA**” submitted by


Akshitha Velishoju 1602-21-735-315

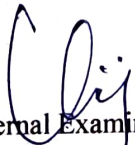
Kavya Sree Rayana 1602-21-735-149

Akshaya Gayathri Malyala 1602-20-735-125

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


Internal Guide
Dr. ABID ALI KHAN
Assistant Professor
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work **“FPGA Implementation of Image Encryption and Decryption Algorithm which using Image Line Buffer based Pixel Shuffling method”**

submitted by

MALIPATEL ABHINAV

1602-21-735-134

KUSUMA MADHAV

1602-21-735-156

SUNKE VAMSHI KRISHNA

1602-21-735-185

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

S. A. Deepthi
SUPERVISOR

Dr. S. ARUNA DEEPTHI

Assistant Professor

E.C.E Department

S. S. Sreenivasarao
Head of the Department

Dr.E. SREENIVASARAO

Professor and HOD

E.C.E Department

Clj
External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled "**Sentimental Analysis on IMDB Reviews using Transformer And FNet Models**" submitted by

BHARGAV KOMMU

1602-21-735-140

ARUN PANGA

1602-21-735-138

NAGARAJU JANNE

1602-21-735-160

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


SUPERVISOR

B. UMA MAHESH BABU

Assistant Professor

E.C.E Department

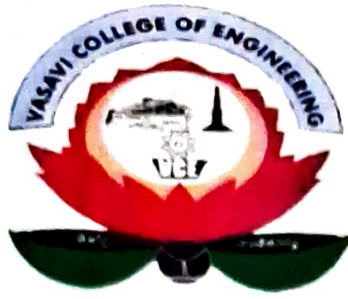

Head of the Department

Dr.E. SREENIVASA RAO

Professor and HOD

E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled "**Echo and Noise Cancellation using Filtering Techniques**" submitted by


KEERTHANA KANKANALA 1602-21-735-150

BALANAKU LAKSHMAN 1602-21-735-154


SAITEJA BODA 1602-21-735-174


students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

SUPERVISOR


Mrs. Ch. Neetu
Assistant Professor
E.C.E Department

Head of the Department


Dr.E. SREENIVASA RAO
Professor and HOD
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled **“Performance Analysis of Compact Decoders for SRAM Arrays”** submitted by

S.Venkata Sai Vathsalya

1602-21-735-191


S.Minnu

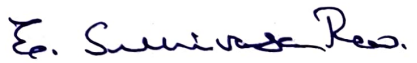
1602-21-735-159


U.Thirupathi Rao

1602-21-735-182

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Supervisor
Dr. E.SREENIVASA RAO
Professor and HOD
E.C.E Department


Head of the Department
Dr. E.SREENIVASA RAO
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External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the project work titled "Text based Multi-class Hate speech Detection for Social Media Integrity" submitted by

K SAI SRI VARSHITHA

1602-21-735-172

K SHARATH CHANDRA

1602-21-735-176

V MAHESHWARI

1602-21-735-158

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

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Assistant Professor

ECE Department

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Hon. Dr.E. Sreenivasa Rao

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Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “**Low-Power, High-Speed, and Area-Efficient Multiplier Based on the Pass Transistor Logic** ” submitted by

M.Chandrika

1602-21-735-317

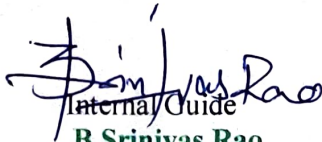
Mehrunissa Begum

1602-21-735-320


Sk.Gousia Begum

1602-21-735-144

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Internal Guide

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Date:

CERTIFICATE

This is to certify that the project seminar report titled “**Implementation of Cyber-Attack Detection Using Autoencoders – A Machine Learning Technique**” submitted by

P. Varun Reddy

1602-21-735-189


Fahad Ali Khan


1602-21-735-143

G. Rohith Reddy

1602-21-735-166

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


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VASAVI COLLEGE OF ENGINEERING (Autonomous)
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CERTIFICATE

This is to certify that the Major project work titled **“NEW CONSTRUCTIONS OF GIRTH-8 QC-LDPC CODES FOR FUTURE GNSS”** submitted by

GOGADA ABHISHEK	1602-21-735-135
KOUSHIK INDRA GANDI	1602-21-735-151
D N SAI SRI HARSHA	1602-21-735-171

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this major project report has not been submitted to any other university or institute for the award of any degree.

Internal Guide
Dr. Vibha Kulkarni
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IBRAHIMBAGH, HYDERABAD-500031

Date: 30/04/2025

CERTIFICATE

This is to certify that the project work titled " **Performance Analysis of Energy Efficient MAC Unit for Digital Applications** " submitted by

MARAMREDDY RAJA MOHAN REDDY	1602-21-735-164
PEDDAKAPU PREETHAM	1602-21-735-163
RISHIKA BAJAJ	1602-21-735-165

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


SUPERVISOR

Ms. SAJJANAPU JHANSI NAGA LAXMI

Assistant Professor


E.C.E Department


HEAD OF THE DEPARTMENT

Dr. E. SREENIVASA RAO

Professor and HOD

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Department of Electronics and Communication Engineering Vasavi

College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date: 30.04.2025

CERTIFICATE

This is to certify that the Major project work titled “3D Antenna Characterization” submitted by

Muskula Ruthwika

1602-21-735-167

Gaddam Sainadh

1602-21-735-173

Namile Sridhar

1602-21-735-179

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this major project report has not been submitted to any other university or institute for the award of any degree

Internal Guide

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Associate Professor
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Head of the Department
Dr. E. SREENIVASA RAO
Professor & HoD
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Department of Electronics and Communication Engineering

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ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “ Air Swipe - Gesture control System ” submitted by

R.Jaya surya

1602-22-735-018

M.Ram Charan

1602-22-735-045

Chirumamilla Varun
Chowdary

1602-22-735-061

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “Multi-Modal AI Translator Bridging Speech,
Emotion and Sign Languages” submitted by

YV Anirudh

1602-22-735-004

J. Radha Krishna

1602-22-735-041

Vardhan Manjunath

1602-22-735-057

Bijinepalli

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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IBRAHIMBAGH, HYDERABAD-500031

Date: 24/04/25

CERTIFICATE

**This is to certify that the Project work titled “E wallet app using Spring boot”
submitted by**

Om Vinod Alalagi

1602-22-735-038

K S Rahul

1602-22-735-042

V Ruthvik

1602-22-735-050

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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IBRAHIMBAGH, HYDERABAD-500031

Date: 24/04/25

CERTIFICATE

This is to certify that the Project work titled “Egg Incubation System for High-Altitude Environments” submitted by

A Datha Sai

1602-22-735-013

A. Datha Sai

S Rishi Preetham

1602-22-735-049

S. Rishi preetham

D Kusuma

1602-22-735-302

D. Kusuma

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Head of the Department

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Department of Electronics and Communication Engineering
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IBRAHIMBAGH, HYDERABAD-500031

Date:26/04/2025

CERTIFICATE

This is to certify that the Project work titled **“Wireless Communication link with SDR”** submitted by

K. AKASH RAM

1602-22-735-002


P. BALA SATYA SRI

1602-22-735-010



A. RAJENDER

1602-22-735-043

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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IBRAHIMBAGH, HYDERABAD-500031

Date: 26/04/2025

CERTIFICATE

This is to certify that the Project work titled “A Smart Vacuum Cleaner Robot” submitted by

K. AKSHAY TEJA

1602-22-735-003

P. HIMA TEJA

1602-22-735-017

D. RAKESH

1602-22-735-044

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date: 30/04/25

CERTIFICATE

**This is to certify that the Project work titled “IOT based Smart Refrigerator”
submitted by**

M. Bhavishya 1602-22-735-011

G. Dheekshith 1602-22-735-014

K. Srihitha 1602-22-735-020

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date: 22nd April' 2025

CERTIFICATE

This is to certify that the Project work titled “**Microwave Nondestructive Evaluation Algorithms for Accurate Material Characterization and Defect Detection**” submitted by

K. Lohitha Reddy 1602-22-735-022

Mustafa Amaan 1602-22-735-030

M. Ravindra 1602-22-735-046

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
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Vasavi College of Engineering (Autonomous)

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IBRAHIMBAGH, HYDERABAD-500031

Date: 24/04/25

CERTIFICATE

**This is to certify that the Project work titled “E wallet app using Spring boot”
submitted by**

Mohammed Mohsin

1602-22-735-027

Mohammed Abdul Sabeel Khan

1602-22-735-028

Mohammed Imad Hussain

1602-22-735-029

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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Date: 26/04/2025

CERTIFICATE

This is to certify that the Project work titled **"Wireless Communication link with SDR"** submitted by

D.ARTHI REDDY

1602-22-735-008


K.BHUVANESHWARI

1602-22-735-012

A.MEGNA


1602-22-735-026

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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Department of Electronics and Communication Engineering

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IBRAHIMBAGH, HYDERABAD-500031

Date: 22nd April' 2025

CERTIFICATE

This is to certify that the Project work titled “ UPI Fraud Detection using ML ” submitted by

M. Harika

1602-22 -735-016

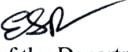
P. Srija


1602-22 -735-055


B. Sahithya

1602-22-735-304

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “Weather Forecasting using MATLAB” submitted by

A.Lokesh Goud

1602-22-735-304

A. Shashank

1602-22-735-306

K. Sai Bharath

1602-22-735-307

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

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Department of Electronics and Communication Engineering
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CERTIFICATE

This is to certify that the Project work titled “ **Aircraft Navigation using RTL-SDR**” submitted by

M. Abhinov

1602-22 -735-001


B. Prashanth


1602-22 -735-039


Tarana

1602-22-735-056

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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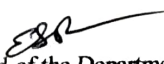
Date: 22nd April' 2025


CERTIFICATE


This is to certify that the Project work titled “ **FPGA-Based Real-Time AI-Powered Smart Toll Collection System with Vechile Type Detection.** ” submitted by

Md. Rahath	1602-22 -735-031
B Nandini	1602-22 -735-032
G Ramya	1602-22-735-301

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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Associate Professor
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This is to certify that the Mini project work titled,

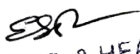
“Personalized Smart Medication Dispenser with IOT Monitoring”


J SMRUTHY 1602-22-735-053


V.YASHASWI 1602-22-735-063

P SARIKA 1602-22-735-305

Submitted by students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree


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K. Ramakrishna
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Asst. prof.



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Date:

CERTIFICATE

This is to certify that the Project work titled “ **Vehicle Anti-Theft System-GPS-based Vehicle Tracking and Remote Engine Shutdown** ” submitted by

L.Manaswini

1602-22-735-023


Meenakshy N.

1602-22-735-025


Richie Samuel


1602-22-735-047

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


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PROF. & HEAD

DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.


Coordinator
Dr. D.M.K.Chaitanya
Associate Professor
E.C.E Department


Coordinator
K.Ramakrishna Reddy
Assistant Professor
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

s to certify that the Project work titled "Offline Home Automation System Using ESP32 and Voice Recognition submitted by

A.Arvind

1602-22-735-006

B.Arvind

1602-22-735-007

G.Niketh reddy

1602-22-735-035


students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

Dr. E.SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.

Co-ordinators:


Dr. DMK Chaitanya, K.Rama Krishna Reddy
Associate professor, Assistant professor
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Mini project work titled, "**Smart Hearing Aids using AIML**"

Submitted by

B.KEERTHANA 1602-22-735-019

K.NANDITHA 1602-22-735-033

Y.VAISHNAVI 1602-22-735-054

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree

Head of the Department

Dr.E.Sreenivasa Rao

Professor & HOD

E.C.E Department

PROF. & HEAD

DEPARTMENT OF E.C.E.

VASAVI COLLEGE OF ENGG.

HYDERABAD-500 031.

Co-Ordinator

Dr.D.M.K Chaitanya

Associate professor

E.C.E Department

Co-Ordinator

K.Ramakrishna Reddy

Assistant Professor

E.C.E Department

External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

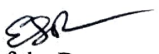
Date: 22nd April' 2025

CERTIFICATE


This is to certify that the Project work titled “ AI-driven traffic management with real-time monitoring and adaptive traffic light timings for heavy-traffic routes.” submitted by


P. Gopi Krishna	1602-22 -735-015
D. Kishore	1602-22 -735-021
J. Rishi	1602-22-735-048


students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Dr. E. Sreenivasa Rao
Professor & HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.


Co-Ordinator
Dr. D.M.K Chaitanya
Associate Professor
E.C.E Department


Co-Ordinator
K. Ramakrishna Reddy
Assistant Professor
E.C.E Department


External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “ ~~SEED SOWING~~ ROBO using ~~AR~~ **ARDUINO** submitted by

Anvesh

1602-22 -735-005


Ashish Yadav


1602-22 -735-009


Nishanth reddy

1602-22-735-037

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Dr. E. Sreenivasa Rao
Professor & HOD
E.C.E Department


Co-Ordinator
Dr. D.M.K Chaitanya
Associate Professor
E.C.E Department


Co-Ordinator
K. Ramakrishna Reddy
Assistant Professor
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.


External Examiner

APPENDIX



Department of Electronics and Communication Engineering Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 22nd April' 2025

CERTIFICATE

This is to certify that the Project work titled “ **DIY Grass Cutter Rover Using Aurdino** ” submitted by

M. Varshith

1602-22 -735-058

P. Varshith Raj

1602-22 -735-059

B. Varshitha Reddy

1602-22-735-060

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Dr. E. Sreenivasa Rao
Professor & HOD
E.C.E Department

PROF. & HEAD

Co-Ordinator
Dr. D.M.K Chaitanya
Associate Professor
E.C.E Department

Co-Ordinator
K. Ramakrishna Reddy
Assistant Professor
E.C.E Department

**DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG
HYDERABAD-500 031.**

External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date: 22nd April' 2025

CERTIFICATE

This is to certify that the Project work titled “A Water Dispenser for Plants That Can Be Monitored and Operated Via a Mobile App” submitted by

B. SAI CHANDU 1602-22-735-051

CH. SHASHANK 1602-22-735-052

M.VIVEK 1602-22-735-062

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Dr. E. Sreenivasa Rao
Professor & HOD
E.C.E Department

Co-Ordinator
Dr. D.M.K Chaitanya
Associate Professor
E.C.E Department

Co-Ordinator
K. Ramakrishna Reddy
Assistant Professor
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.

External Examiner

**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

**Vasavi College of Engineering
Hyderabad
500031**



CERTIFICATE

This certifies that the report titled **ASIC Design of PWM Generator**, which was turned in to the Vasavi College of Engineering(A) by **Md.Armaan Hus-sain, DV Kushal Kumar**, to partially fulfill the requirements for the award of the Degree of Bachelor of Engineering in Electronics & Communication Engineering is a true account of the project work completed by him/her under my/our supervision and guidance.No other university or institute has received this report, in any format, for any reason.

Project Coordinator

Name : Mr. V. Krishna Mohan

Signature :

Project Coordinator

Name : Dr.R Ramya

Signature :

Head of Department

Name : Dr.E Sreenivasa Rao

Signature :

External Examiner

Name

Dr. M. Shyam Sunder.

Signature :

(Signature)

DEPARTMENT OF ECE



CERTIFICATE

This is to certify that the report entitled **DESIGN AND VERIFICATION OF I2C PROTOCOL IN SYSTEM VERILOG** submitted by

Ramisetty Gayathri Vydika	1602-22-735-074
K. Navya Reddy	1602-22-735-082
K. Yochana	1602-22-735-126

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

Dr. R. RAMYA
Assistant Professor – Dept of ECE

Dr. V. Krishna Mohan
Assistant Professor – Dept of ECE

Head of the Department
Dr.E. SREENIVASA RAO
Professor and HOD
Vasavi College of Engineering (Autonomous)

Signature of The External Examiner

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031



CERTIFICATE

This is to certify that the report entitled **Design and Implementation of a 5-Stage Pipelined RISC-V Processor** submitted by

S. Akhilesh 1602-22-735-065

P. Ambarish 1602-22-735-069

Y. Hemanth Kumar 1602-22-735-077

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

Supervisors

Dr. R. Ramya

Assistant Professor – Dept of ECE

Mr. V. Krishna Mohan

Assistant Professor – Dept of ECE

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

Vasavi College of Engineering (Autonomous)

Signature of The External Examiner



**DEPARTMENT OF ELECTRONIC AND COMMUNICATION
ENGINEERING**

**VASAVI COLLEGE OF ENGINEERING IBRAHIMBAGH,
HYDERABAD-500031**

CERTIFICATE

This is to certify that the Mini Project work titled **Real - Time Accelerated Image
Dehazing on FPGA** submitted by

Rohan Muthyala 1602-22-735-093

Yennam Sai Tharun Reddy 1602-22-735-099

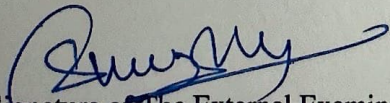
Shaik Mohammed Ayub 1602-22-735-106

K. Sridurga Kumar 1602-22-735-115

Students from the **Electronics and Communication Engineering Department** at Vasavi College of Engineering have prepared this report as a part of their academic requirements for earning a Bachelor of Engineering degree in Electronics and Communication Engineering. This document represents their original work completed during the academic year 2025-2026. The findings and content of this project report have not been submitted to any other university or institution for the award of any degree.

Signature of the Supervisor
V. KRISHNA MOHAN
Project Coordinator
Dept. of ECE
Vasavi College of Engineering

Signature of the Supervisor
Dr. R. RAMYA
Project Coordinator
Dept. of ECE
Vasavi College of Engineering


Signature of The External Examiner

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031



CERTIFICATE

This is to certify that the report entitled **Design and Implementation of 2.4GHz Transmitter and Receiver Antennas for Wireless communication** submitted by

B. Ajay	1602-22-735-064
V. Akshith Kumar	1602-22-735-066
M. Akshith	1602-22-735-067
D. Shiva Kumar	1602-22-735-112

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

Dr.R.Ramya
Assistant Professor – Dept of ECE

Mr.V.Krishna Mohan
Assistant Professor – Dept of ECE

Head of the Department
Dr.E. SREENIVASA RAO
Professor and HOD
Vasavi College of Engineering (Autonomous)

Signature of The External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering(Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-25

CERTIFICATE

This is to certify that the Mini Project work titled "SAFE PATH NAVIGATION" submitted by

V.Shainy	1602-22-735-107
T.Shirisha	1602-22-735-111
A.Sravanthi	1602-22-735-313

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the academic requirements for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

Dr. RAMYA R
Assistant Professor – Dept of ECE

Dr. V. KRISHNA MOHAN
Assistant Professor – Dept of ECE

Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
Vasavi College of Engineering (Autonomous)

Signature of The External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 06-05-2025

CERTIFICATE

This is to certify that the Mini Project work titled " **AI-Driven Cyber security Threat Intelligence** " submitted by

U. Sathwik	1602-22-735-103
K. Sidhartha Rao	1602-22-735-114
S. Srinija	1602-22-735-117

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Signature of the Supervisor

V.KRISHNA MOHAN

Assistant Professor – Dept of ECE

Vasavi College of Engineering (Autonomous)

Head of the Department

Dr.E. SREENIVASA RAO

Professor and HOD

Vasavi College of Engineering (Autonomous)

Signature of The External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering(Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-25

CERTIFICATE

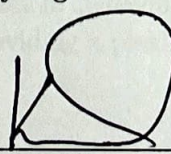
This is to certify that the Mini Project work titled "FLOATING POINT MAC UNIT" submitted by

KHATA RUSHIKA	1602-22-735-310
CHIPPA SATHVIKA	1602-22-735-311
KAMUTALA AASHRITHA	1602-22-735-312

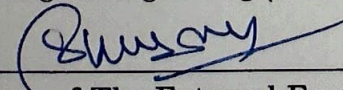
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the academic requirements for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

Dr. RAMYA R
Assistant Professor – Dept of ECE


Dr. V. KRISHNA MOHAN
Assistant Professor – Dept of ECE

Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
Vasavi College of Engineering (Autonomous)


Signature of The External Examiner



ACKNOWLEDGEMENT

VASAVI COLLEGE OF ENGINEERING(A)

Hyderabad-500031

Date: 19th April 2025

CERTIFICATE

This is to certify that the project report titled “Unmanned Ground Vehicle” is being submitted by **Nenavath Pavan (1602-22-735-085), Nithin Kumar (1602-22-735-083), and Swaraj Y (1602-22-735-119)** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Engineering** in the **Department of Electronics and Communication Engineering, Vasavi College of Engineering (Autonomous), Hyderabad.**

The project work presented in this report is a genuine and original record of the work carried out by them at the **Department of Electronics and Communication Engineering, Vasavi College of Engineering (A), Hyderabad**, under my guidance and supervision.

Mr. KRISHNA MOHAN

Assistant Professor

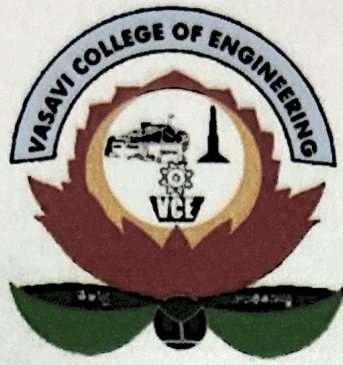
Department of ECE

D.R.E. SREENIVASA RAO

Professor and HOD

Department of ECE

Entered Exam



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING**

**VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD-500031**

CERTIFICATE

This is to certify that the Theme Based project work titled **Real-Time Video Streaming Optimization using Qos-Aware SDN Traffic Engineering** submitted by

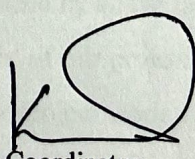
M.Sampath Reddy 1602-22-735-101

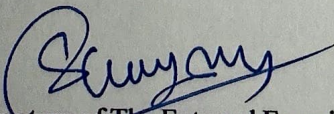
M.Sathwik 1602-22-735-102

K. Yashwanth Reddy 1602-22-735-125

students of **Electronics and Communication Engineering Department**, This project is submitted by M.Sampath Reddy, M.Satwik and k.Yashwanth Reddy to the Electronics and Communication Engineering Department, Vasavi College of Engineering, in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering, is a record of the genuine work carried out by them during the academic year 2024-2025

Project Coordinator
Dr RAMYA.R
Assistant professor


project Coordinator
V.KRISHNA MOHAN
Assistant Professor


Signature of The External Examiner



**DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING
VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD-500031**

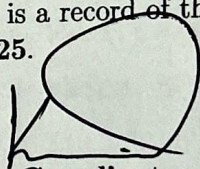
CERTIFICATE

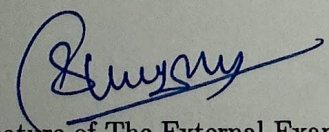
This is to certify that the Theme Based project work titled **FAST GENERATION
OF CUSTOM FLOATING POINT SPATIAL FILTER** submitted by

**Sk. Afzal 1602-22-735-105
Y. Tejas Goud 1602-22-735-120
P. Raju Kumar Swamy 1602-22-735-308**

students of **Electronics and Communication Engineering Department**, This project is submitted by Sk. Afzal, Y. Tejas Goud and P. Raju Kumar Swamy to the Electronics and Communication Engineering Department, Vasavi College of Engineering, in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering, is a record of the genuine work carried out by them during the academic year **2024-2025**.

Project Coordinator
Dr. RAMYA. R
Assistant Professor


Project Coordinator
V. KRISHNA MOHAN
Assistant Professor


Signature of The External Examiner

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031



CERTIFICATE

This is to certify that the report entitled **Jamming Detection and Anti-Jamming for Military Communications** submitted by

G Tarun	1602-21-735-123
KVS Karthik	1602-22-735-123
M Vignesh	1602-22-735-124

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

Dr. R RAMYA,
Assistant Professor – Dept of ECE

V.Krishna Mohan
Assistant Professor – Dept of ECE

Head of the Department

Dr.E Sreenivasa Rao
Professor and HOD

Vasavi College of Engineering (Autonomous)

Signature of The External Examiner

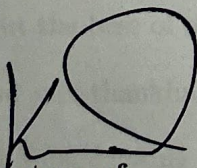
CERTIFICATE

I hereby certify that the work, which is being presented in the project report, entitled Phase locked loop desgin , in partial fulfillment of the requirement for the award of the Bachelor of engineering in electronics and communication and submitted to the institution is an authentic record of my own work carried out during the period of febraury 2025 to ap2024 under the supervision of Mr.V.Krishna Mohan and Dr.R.Ramya.

I also cited the reference about the code and information regarding interfacing of Fpga board from where they have been taken.

The matter presented in this report has not been submitted elsewhere for the award of any other degree or diploma from any institutions.

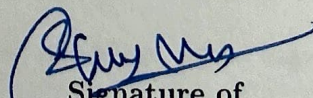
This is to certify that the above statement made by the candidate is correct to the best of my knowledge. The Viva-Voce examination of M.Rishitha ,K.Sahithi,Y.padma priya dharshini BE, ECE Students has been held on 06-05-2025.



Signature of
Project Coordinator
Name:Mr.V.Krishna
Mohan

Signature of
Head of the
Department
Dr. E. Sreenivasa Rao

Signature of
Project Coordinator
Name:Dr.R.Ramya

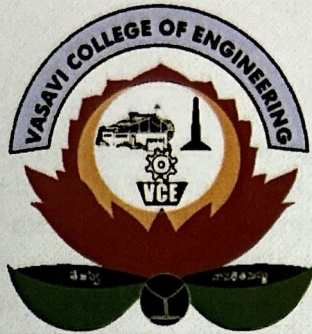


Signature of
External Examiner

VASAVI COLLEGE OF ENGINEERING

HYDERABAD-500039

2024-2025



CERTIFICATE

This is to certify that the project titled "Image Processing Using FPGA" has been successfully completed by:

Adivishnu Naga Sumanth 1602-22-735-081

Rajendhar 1602-22-735-089

Nithin 1602-22-735-083

Under the guidance and supervision of V Krishna Mohan (Assistant professor) This project is Presented as part of the requirements for the completion of the degree in ECE at the Vasavi College Of Engineering.

V KRISHNA MOHAN
(Assistant professor)

Dept. of ECE
Vasavi college
of engineering
Hyderabad, Telangana

DR.E.SREENIVASA RAO
(Head Of the Department Coordinator)
Professor and Head
Dept. of ECE
Vasavi college
of engineering
Hyderabad, Telangana

signature of the external examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Mini Project work titled "CANONICAL HUFFMAN ENCODER "
submitted by

STUDENT NAME:M.SAI SUDEEP REDDY,1602-22-735-098

STUDENT NAME:C.SAI PRATEEK,1602-22-735-096

STUDENT NAME:ROOPAK,1602-22-735-095

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Signature of the Supervisor

V.KRISHNA MOHAN

Assistant Professor – Dept of ECE

Vasavi College of Engineering (Autonomous)

Head of the Department

Dr.E. SREENIVASA RAO

Professor and HOD

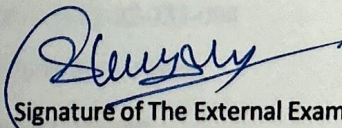
Vasavi College of Engineering (Autonomous)

Signature of the supervisor

Dr.RAMYA R

Department of ECE

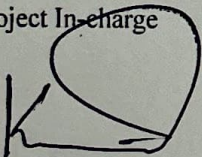
Vasavi College of engineering


Signature of The External Examiner

CERTIFICATE

This is to certify that the project work titled "Design of 2D FIR Filter Architecture using Approximate Multipliers and Compressors" submitted to the Vasavi College of Engineering, affiliated to OU by
N.DEEPANJANA (1602-22-735-071),
RISHITHA SATIRI (1602-22-735-092),
D SHARON DAMARIS (1602-22-735-108),
is a bonafide record of the work done by the students towards partial fulfilment of requirements for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering during the academic year 2024-2025.

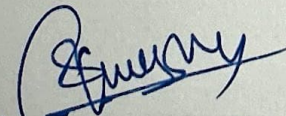
Project In-charge



V. Krishna Mohan
Associate Professor
Dept. of ECE
DR. Ramya R
Assistant Professor

Head of the Department

E. Srinivasa Rao
Head of Department
ECE


(External Examiner.)



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Mini Project work titled "DRONE-BASED CONSTRUCTION MONITORING" submitted by

STUDENT NAME: ARETY HEMANTH 1602-22-735-076

STUDENT NAME: M. SHASHIDHAR REDDY 1602-22-735-110

STUDENT NAME: KVS. ANUROOP 1602-22-735-122

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Signature of the Supervisor

V. KRISHNA MOHAN

Assistant Professor – Dept of ECE

Vasavi College of Engineering (Autonomous)

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

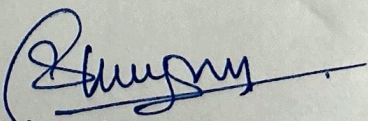
Vasavi College of Engineering (Autonomous)

Signature of the supervisor

Dr. RAMYA R

Department of ECE

Vasavi College of engineering


Signature of The External Examiner

VLSI IMPLEMENTATION OF SPI COMMUNICATION PROTOCOL ON FPGA FOR TARGET-TO-PERIPHERAL DATA TRANSFER

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Abhigna Gogu

1602-22-735-127

Harshitha Gurram

1602-22-735-148

Sanjana Kaler

1602-22-735-172

Under the guidance of

DR. K. Deepti

Associate Professor, E.C.E



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

AUTOMATING INTERNSHALA APPLICATIONS

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

POTTABATHINI DILEEP KUMAR

1602-22-735-142

DOMA ABHISHEK REDDY

1602-22-735-129

VISLAVATH SRAVANTHI

1602-22-735-179

**Under the guidance of
Name: Dr .K Deepthi
Designation: Associate Professor
E.C.E Department**



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

**ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031**

2024-2025

NEXT GEN BLOCKCHAIN BASED E-COMMERCE WEBSITE

A Mini Project Report submitted in partial fulfillment of the academic requirement for
the award of the degree of

BACHELOR OF ENGINEERING

Batch - 1

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Y. DAIVIK

1602-22-735-139

T S KARTHIKEYA

1602-22-735-165

K SAI RATNA

1602-22-735-170

Under the guidance of

Dr.K. DEEPTI

Associate Professor

E.C.E Department

Dr. K.R.DEEPTHI

Assistant Professor

E.C. E Department



**Department of Electronics and Communication Engineering Vasavi College of
Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2022-2026

Batch-18

1

DESIGN OF WIFI SIGNAL STRENGTH ANALYSER AND OPTIMAL ROUTER POSITIONING

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

GAJJE KARTHIK

1602-22-735-151

EMMIDI AJAY KUMAR

1602-22-735-132

CH ANU TAPASWI

1602-22-735-134

Under the guidance of

Name: Dr .K Deepthi

Designation: Associate Professor

E.C.E Department



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Design of 4-bit MAC Unit using Hybrid GDI and Performance Analysis

Project Work

Submitted in partial fulfilment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

BY

KANDI AKASH 1602-22-735-133

SAI KRISHAN 1602-22-735-167

A TEJASWI ARURI 1602-22-735-183

Under the guidance of

Dr. K Deepti

Associate Professor, ECE



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

MAKING A MINI QUADCOPTER

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Gnaneshwari.L

1602-22-735-145

Kamalesh.G

1602-22-735-150

Vigneshwar Reddy Chintaki

1602-22-735-186

Under the guidance of

Name: Dr. K. Deepti

Designation: Associate Professor

E.C.E Department



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

AMBA APB Protocol Implementation on FPGA

The Project Report submitted in partial fulfilment of the academic requirements for the award
of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

SALIGANTI SRIRAJ 1602-22-735-180

SUMAIYA BEGUM 1602-22-735-181

MUDAVATH MANJULA 1602-22-735-154

Under the guidance of

DR. K. Deepthi

Associate Professor, E.C.E



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Combined use of Median & Bilateral Filters to remove Gaussian noise in Images

The Theme-based project submitted in partial fulfilment of the academic requirements for the
award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

M ADARSH

1602-22-735-131

G SAI HIMAVARSHINI

1602-22-735-171

S SHREENIDHI

1602-22-735-176

Under the guidance of

Dr.K.Deepthi

Associate Professor, E.C.E

Ms. K.R.Deepthi

Assistant Professor, E.C.E



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2022-2026

COMPARSION OF DIFFERENT ADC'S FOR HIGH FREQUENCY APPLICATIONS

Project work

**Submitted in partial fulfillment of the academic requirement for the award of
the degree of**

BACHELOR OF ENGINEERING

In

ELECTRONIC AND COMMUNICATION ENGINEERING

By

D.MAITHIRI

1602-22-735-318

N.VAISHNAVI

1602-22-735-320

SHIVANI VASA

1602-22-735-175

Under the guidance of

Name: DR.K.Deepthi

Designation: Associate professor



Department of Electronics and Communication Engineering

+Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMRAGIL, HYDERABAD-500031

2024-2025

CLASSIFY RF SIGNALS USING AI

The Theme-Based Report submitted in partial fulfilment of the academic requirements for
the award of the degree of

BACHELOR OF ENGINEERING
In
ELECTRONICS AND COMMUNICATION ENGINEERING

By

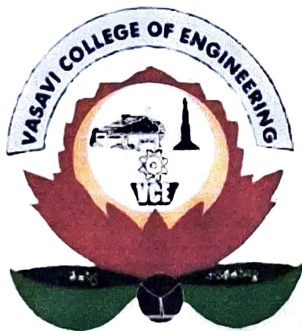
MUDEM ESHWAR REDDY
JAVVADI INDRANI
SOURMIYA SOMA

1602-22-735-144
1602-22-735-149
1602-22-735-178

Under the guidance of

KR. DEEPTHI
ASSISTANT PROFESSOR
E.C.E DEPARTMENT

DR. K. DEEPTHI
ASSOCIATE PROFESSOR
E.C.E DEPARTMENT



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031
2024-2025

Batch - 20

VLSI Design of Saturation-Based Image Dehazing Algorithm

Project work

Submitted in partial fulfillment of the academic requirement for the award of the
degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

E. Dileep

1602-22-735-141

A. Abishek

1602-22-735-130

G. Pavani

1602-22-735-159

Under the guidance of

Name: Dr. K Deepthi

Designation: Associate Professor

E.C.E Department



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Batch-4

IMPLEMENTATION OF ALR FOR TEXT TO IMAGE

A Mini Project Report submitted in partial fulfillment of the academic requirement for
the award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

G.MANASA

1602-22-735-153

J.RAGHAVENDRA

1602-22-735-162

G.RAMA KRISHNA

1602-22-735-163

Under the guidance of

Dr.K. DEEPTI
Associate Professor
E.C.E Department

Dr. K.R.DEEPTHI
Assistant Professor
E.C. E Department



**Department of Electronics and Communication Engineering Vasavi College of
Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2022-2026

Design of ALU using Reversible logic gates

The Project Report submitted in partial fulfilment of the academic requirements for the award
of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

KADARI ABHI RAM REDDY 1602-22-735-128

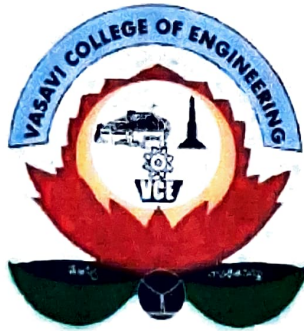
PALLAPU VIJAY KUMAR 1602-22-735-321

KALAL RAVI TEJA GOUD 1602-22-735-164

Under the guidance of

DR. K. Deepthi

Associate Professor, E.C.E



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Design and Implementation of a Low Power Operation Amplifier

The Mini Project Report submitted in partial fulfilment of the academic requirements for the award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

B .HARSHITHA 1602-22-735-147

P. SAI HIBAH 1602-22-735-166

SAUJANYA CH. 1602-22-735-174

Under the guidance of

Dr. M. Praveen Kumar

Assistant Professor, E.C.E



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2022-2026

BATCH - 14

1

Designing of EFHW Antenna for Ham Radio Application

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Lendale Krishna Kumari

1602-22-735-152

Kadamoni Paramesh

1602-22-735-157

Paili Pavan Teja

1602-22-735-158

Under the guidance of
Name: Dr. K. Deepti
Designation: Associate Professor
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

2024-2025

MODULATION CLASSIFICATION WITH DEEP LEARNING

The Mini Project Report submitted in partial fulfilment of the academic requirements for the award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

B.KAVERI 1602-22-735-136

D.BHARATH 1602-22-735-137

P.SANJANA 1602-22-735-173

Under the guidance of

Dr.k.Deepti

AssociateProfessor, E.C.E



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A+' GRADE

IBRAHIMBAGH, HYDERABAD-500031 .2024-2025

DIGITAL DESIGN AND SIMULATION OF AXI MASTER INTERFACE

Project work

Submitted in partial fulfillment of the academic requirement for the award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

G N SIDDHARTH

1602-22-735-177

**CHILUKA VAMSHI
KRISHNA**

1602-22-735-185

SAI MANAS BURAGADDA

1602-22-735-168

**Under the guidance of
Dr K Deepti**

**Designation
Associate Professor
E.C.E Department**



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Batch - 22

PYTHON BASED MEDBOT

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

GOLI MEENAKSHITA

1602-22-735-155

ADEPU VAISHNAVI

1602-22-735-188

Y ARYAN REDDY

1602-22-735-135

**Under the guidance of
Name: Dr .K Deepthi
Designation: Associate Professor
E.C.E Department**



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Colorizing Black and White Photo with Deep Learning

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

G. Sai Rathan

1602-22-735-169

P. Praneeth Kumar

1602-22-735-161

T. Poojitha Reddy

1602-22-735-160

**Under the guidance of
Dr.K.Deepti - Associate Professor,
Mrs.K.R.Deepti - Assistant Professor.
E.C.E Department**



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Batch 19

Adaptive RC Transmitter for Universal Applications

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Dileep Saliganthi

1602-22-735-143

Mohammed Muneeb Ahmed

1602-22-735-156

Sayed Abdul Mustaffa Mohiseen

1602-22-735-182

Thati Aniketh Kumar

1602-22-735-317

Under the guidance of

Name: Dr. K. Deepti

Designation: Associate Professor

E.C.E Department



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “**Smart Door locking system using bluetooth-based home security** ” submitted by

Y Deepthi

1602-23-735-010


N Nigam


1602-23-735-024

K Sakshitha

1602-23-735-038

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.


Internal Supervisor
Asst. Prof.

Signature of External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: April 25, 2025

CERTIFICATE

This is to certify that the Project work titled **“SOLAR POWERED IRRIGATION SYSTEM”** submitted by

R.RAHUL RAO

1602-23-735-027


K.SAIKIRAN REDDY

1602-23-735-035

K.VINAY KUMAR

1602-23-735-060

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the BONA FIDE work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Professor and HOD

DR.E. Sreenivasa Rao
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**


Internal Guide
DR.A. Srilakshmi

E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled **“IMPLEMENTATION OF RFID BASED DOOR ACCESS CONTROL”** submitted by

K.SARITHA	1602-23-735-306
G.SHEKAR	1602-23-735-302
G.GAYATHRI	1602-23-735-305

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

ECE Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**


Dr. Srilakshmi Aouthu

Associate professor Designation



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “Footstep based Electricity generation for charging” submitted by

ALLADI RITHVIKA

1602-23-735-301

JEEDIPALLY BHUPATHI REDDY

1602-23-735-303


VINAY AGARWAL

1602-23-735-059

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.


Internal Guide
E.C.E Department



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “**Earthquake Detection System with networked sensor validation**” submitted by

LAKAVATH SWATHI

1602-23-735-051

KONERU TARUN

1602-23-735-052

BILAVATH MOUNIKA

1602-23-735-307

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

Dr. E. Sreenivasa Rao
Professor and HOD
E.C.E Department


Internal Guide

Dr. Srilakshmi Aouthu
Designation : *Assoc. Prof.*
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “ ” submitted by

P.Narendra

1602-22-735-034

B.Upender

1602-23-735-055

B.Srikanth

1602-23-735-048

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Professor and HOD
E.C.E Department

Internal Guide
Designation *Asst. prof.*
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 081.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “Implementation of FreeRTOS (Real-Time Operating System) and Bare Metal Programming on Microcontroller” submitted by

K. SIDDHARTHA **1602-23-735-045**

VEDHAVYAS REDDY **1602-23-735-057**


SHAIK FERAZ **1602-23-735-041**

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

Dr. E. Sreenivasa Rao
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.

Internal Guide 

Dr. Srilakshmi Aouthu
Designation : *Assoc. professor*
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:29-04-2025

CERTIFICATE

This is to certify that the Mini Project work titled “**DESIGN AND IMPLEMENTATION OF CAR PARKING SYSTEM ON FPGA**” submitted by

Ponnolu Sasidhar Reddy	1602-23-735-039
Polavarapu Tejaswini	1602-23-735-054
S. Vishnu Vardhan Reddy	1602-23-735-061

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree.

ESR
Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**

External Examiner

[Signature]
Internal Guide
Dr. SRILAKSHMI AOUTHU
Associate Professor
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “ **GSM(Global system for mobile communications)-based home security** ” submitted by

Pramukh Bojja 1602-23-735-026

Padmavathi KS 1602-23-735-049

M Tejasree 1602-23-735-053

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**


Internal Supervisor

Signature of External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “**Design and Visualization of a Point in 3-D coordinate System using Autodesk Fusion 360**” submitted by

SHEELA NAVYA

1602-23-735-023

ALUPUGONDA HARIKA

1602-23-735-304

**SARASWATIBHATLA
VIVEK**

1602-23-735-064

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department

Dr. E. Sreenivasa Rao
Professor and HOD
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 081.**

Internal Guide
Dr. Srilakshmi Aouthu
Designation : Assoc. Prof
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled "Wireless Ultrasonic Radar using RF Transceiver" submitted by

MAHIDHAR

1602-23-735-020

SHANKAR NARAYAN

1602-23-735-043

SRIDHULA

1602-23-735-047

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Head of the Department
E.C.E Department


Internal Guide
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.



**Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Mini Project work titled **"Delivery Robot with Face Recognition"** submitted by

Kritika Giridhar

1602-23-735-018

P.S.S.R Gayatri

1602-23-735-040

Shirisha Vankudoth

1602-23-735-044

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Dr. E.SREENIVASA RAO
Professor and HOD
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.

Internal Guide
Name: **Dr. SRILAKSHMI AOUTHU**
Associate Professor
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled “**Shape Morphing**” submitted by

K. HARISHRI

1602-23-735-013


SK. SAMEERA

1602-23-735-042

B. SWAPNA

1602-23-735-050

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


Internal Guide
Dr. SRILAKSHMI AOUTHU
Associate Professor
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “**Voice controlled wheel chair using Arduino**”
submitted by

A.Chaitanya sai	1602-23-735-009
T.Harsha vardhan	1602-23-735-014
V.Harshith	1602-23-735-015

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Head of the Department


Dr. E. Sreenivasa Rao HOD

E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.

Internal Guide


Dr. Srilakshmi Aouthu Professor

E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031
Date:29-04-2025

CERTIFICATE

This is to certify that the Mini Project work titled **“GESTURE CONTROLLED ROBOTIC ARM”** submitted by

ANIKA CHOPRA	1602-23-735-004
E. DHEERAJ SAI	1602-23-735-011
P. SAI TEJASWI	1602-23-735-036

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree.


Head of the Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG,
HYDERABAD-500 031.


Internal Guide



DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031



CERTIFICATE

This is to certify that the report entitled “ **HIDDEN CAMERA DETECTOR** ” submitted by

A.Akshaya Reddy - 1602-23-735-003
L.Meghana - 1602-23-735-022
S.Rikhitha - 1602-23-735-032

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors



Dr. Srilakshmi Aouthu
Assistant Professor – Dept of ECE
Assoc.



Mrs.K.R.Deepthi
Assistant Professor – Dept of ECE



Head of the Department

Dr.E.SREENIVASA RAO

Professor and HOD

Vasavi College of Engineering (Autonomous)

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.

Signature of the External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: April ,2025

CERTIFICATE

This is to certify that the Project work titled **“SOLAR PANEL WITH SUN TRACKING POSITION”** submitted by

RAMATENKI ANJANEYULU 1602-23-735-005

YALLANKI ESWARA SUMANTH 1602-23-735-012

KOTAGIRI VIGNESH 1602-23-735-037

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the BONAFIDE work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG,
HYDERABAD-500 031.**

Internal Guide





Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date: 26-04-2025

CERTIFICATE

This is to certify that the Mini Project work titled “**Design of STM32F411CEU6 Board with Altium Designer**” submitted by

Abdul Aleem

1602-23-735-001

Rohith Narsingipya

1602-23-735-034

Raavi Vijay Sagar

1602-23-735-058

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree


Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

PROF. & HEAD

DEPARTMENT OF E.C.E.

VASAVI COLLEGE OF ENGG.

HYDERABAD-500 081.

External Examiner


Internal Guide

Name: Dr. Srilakshmi Aouthu

Associate Professor

E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date: 26-04-2025

CERTIFICATE

This is to certify that the Mini Project work titled **“Design of STM32F411CEU6 Board with Altium Designer”** submitted by

Abdul Aleem

1602-23-735-001

Rohith Narsingipya

1602-23-735-034

Raavi Vijay Sagar

1602-23-735-058

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this mini project report has not been submitted to any other university or institute for the award of any degree


Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department


Internal Guide
Name: Dr. Srilakshmi Aouthu
Associate Professor
E.C.E Department

**PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 031.**

External Examiner



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

This is to certify that the Project work titled “ **Weather Monitoring System Using Arduino And Nodemcu** ” submitted by

B.Vishweshwara Anand

1602-23-735-063

B.Vamshi

1602-23-735-056

K.Viswateja

1602-23-735-062

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Professor and HOD
E.C.E Department


Internal Guide
~~Asst. Prof.~~ Designation
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled **“Women safety device using A9G Board”** submitted by

RAHUL

1602-23-735-028

RAKESH

1602-23-735-029

REMANTH

1602-23-735-031

Students of Electronics and Communication engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Professor and HOD
E.C.E Department

Internal Guide

~~XXXX~~, Designation
E.C.E Department

Asst. prof.



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

CERTIFICATE

This is to certify that the Project work titled **“Bilingual Translator using Raspberry PI ZERO”** submitted by

BETHAPUDI RAMSAI

1602-23-735-030

MUKKU KARUNYA

1602-23-735-017

VISLAVATH MADHURIMA

1602-23-735-019

Students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The result embodied in this project report has not been submitted to any other university or institute for the award of any degree

Head of the Department
Professor and HOD
E.C.E Department

Internal Guide
[Signature]
Designation
E.C.E Department
[Signature]

DESIGN OF FM TRANSMITTER

Mini Project-I

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

R. VEDA SAMHITA

1602-23-735-122

U. SOHITA

1602-23-735-113

G. AKSHITHA

1602-23-735-067



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Title of the Project

PCB DESIGNING USING ALTIUM

Project work

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

K.SUDEEP

1602-23-735-116

N.V.H.KRISHNA

1602-23-735-123

G.NEHANTH

1602-23-735-086

Under the guidance of
Dr K.Deepti
Designation: Associate Professor
E.C.E Department



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE
IBRAHIMBAGH, HYDERABAD-500031

2024-2025

HUMAN BODY TEMPERATURE AND HEART RATE MONITORING ON LCD AND BLUETOOTH

Project work

Submitted in partial fulfillment of the academic requirement for the award of the
degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

BHAVYA MADIREDDY

1602-23-735-074

JASHWANTH REDDY

1602-23-735-079

NEERAJ KETHEPALLI

1602-23-735-085

Under the guidance of

Name: Dr.k.Deepti

Designation: Associate professor,

Name: Dr.D.M.K.Chaitanya

Designation: Associate professor

E.C.E Department



**Department of Electronics and Communication Engineering Vasavi
College of Engineering (Autonomous)**

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

B-15

IoT BASED SMART PARKING SYSTEM

Mini Project - I

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

SK.SHAHEEN

1602-23-735-103

M.TEJASWINI

1602-23-735-118

A.VARSHA

1602-23-735-121



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

SMART SOLID WASTE SEGREGATOR

Project work

Submitted in partial fulfillment of the academic requirement for the award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

P SIDDHARTHA

1602-23-735-109

SIRI SATYAMURTHY

1602-23-735-111

YASHWANTH CH

1602-23-735-128

Under the guidance of
Dr. D. M. K. Chaitanya and Dr. K. Deepti
Designation: Associate Professor
E.C.E Department



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

Radio Frequency Audio Receiver

Mini Project - I

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION

ENGINEERING

By

Venkata Nani

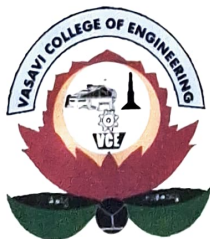
1602-23-735-092

Ravi Prakash

1602-23-735-093

Shivanand Reddy

1602-23-735-108



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

B-18

DETECTION OF CURRENCY NOTE FOR BLIND PEOPLES

A Mini Project Report submitted in partial fulfillment of the academic
requirement for the award of the degree of
BACHELOR OF ENGINEERING

In
ELECTRONICS AND COMMUNICATION ENGINEERING

By

H THARUN RAO

1602-23-735-119

D SAIBHARGAV

1602-23-735-097

K SANTOSH

1602-23-735-101

Under the guidance of

Dr.D.M.K.Chaitanya

Associate Professor, E.C.E



Department of Electronics and Communication Engineering
Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031 2024-2025

IOT Based Smart Cradle

Mini Project - I

Submitted in partial fulfillment of the academic requirement for the award of the degree of
BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Shiraj Patel

1602-23-735-106

D Naga Bhushan

1602-23-735-309

G Bhumes

1602-23-735-311



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

**Battery Level Indicator and GPS Tracking Using GSM Module –
1 and 4 Layered PCB Design**

Project work

Submitted in partial fulfillment of the academic requirement for the award of the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

B.Balu

1602-23-735-073

A.Ekansh

1602-23-735-080

BSS.Prasad

1602-23-735-114



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

LINE FOLLOWING BOT

MiniProject - I

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

S.SANTHOSH

1602-23-735-102

K.SHASHIDEEP

1602-23-735-105

C.SHIVA REDDY

1602-23-735-107



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

PCB DESIGNING USING ALTIUM

Mini Project - I

Submitted in partial fulfillment of the academic requirement for the award of
the degree of

BACHELOR OF ENGINEERING

In

ELECTRONICS AND COMMUNICATION ENGINEERING

By

B V S Sasi kiran

1602-23-735-124

P Naveen

1602-23-735-084

Pradeep Nayak

1602-22-735-087

Under the guidance of

Dr K.Deepthi

Designation: Associate Professor

E.C.E Department



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

2024-2025

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031



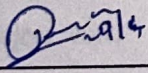
CERTIFICATE

This is to certify that the report entitled **Grass Cutting Robot** submitted by

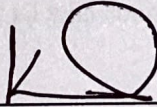
M.Uday Kiran	1602-23-735-184
J.Sai Kiran	1602-23-735-319
S.Anil	1602-23-735-320

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

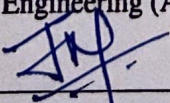


Dr Ramya R
Assistant Professor – Dept of ECE



Mr. V. Krishna Mohan
Assistant Professor – Dept of ECE

Head of the Department
Dr.E. SREENIVASA RAO
Professor and HOD
Vasavi College of Engineering (Autonomous)



Signature of The External Examiner

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031



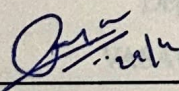
CERTIFICATE

This is to certify that the report entitled **Making of Underwater Drone** submitted by

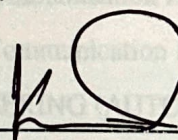
P.Akshaya Reddy 1602-23-735-132
J.Amruth vishal 1602-23-735-133
P.Lohitha Reddy 1602-23-735-146

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

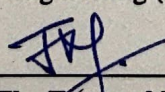


Dr. Ramya.R
Assistant Professor – Dept of ECE



Mr. V. Krishna Mohan
Assistant Professor – Dept of ECE

Head of the Department
Dr.E. SREENIVASA RAO
Professor and HOD
Vasavi College of Engineering (Autonomous)



Signature of The External Examiner

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
ACCREDITED BY NAAC WITH 'A+' GRADE
IBRAHIMBAGH, HYDERABAD-500031



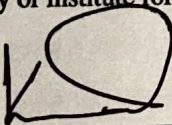
CERTIFICATE

This is to certify that the report entitled **PMSM motor control using Z board** submitted by

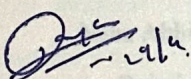
Namratha Kavididevi	1602-23-735-157
Neha Abhinaya Repaka	1602-23-735-160
Rajeshwari Kushala	1602-23-735-164

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Supervisors

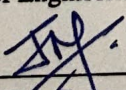


Mr. V. Krishna Mohan
Assistant Professor – Dept of ECE



Dr. Ramya R
Assistant Professor – Dept of ECE

Head of the Department
Dr.E. SREENIVASA RAO
Professor and HOD
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VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
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CERTIFICATE

This is to certify that the report entitled **Synthesizing an ATM interface module from Verilog RTL to GDS using Synopsys** submitted by

G. Maibu Janaki	1602-23-735-149
Mohammad Taher	1602-23-735-152
Dandu Sahasra	1602-23-735-168

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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Supervisors

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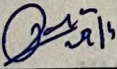
CERTIFICATE

This is to certify that the report entitled **LOW OVERHEAD MBIST FOR EMBEDDED MEMORIES IN SOCs** submitted by


P.Harshitha	1602-23-735-140
S.Sesha Pushpitha Sri	1602-23-735-177
K.Abhinaya	1602-23-735-315

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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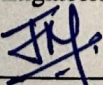


Dr. Ramya.R
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Dr. V.Krishna Mohan
Assistant Professor – Dept of ECE

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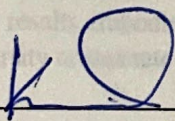
CERTIFICATE

This is to certify that the report entitled **SPACECRAFT HEALTH MONITORING SYSTEM** submitted by

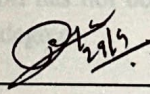
T.Aditya	1602-23-735-129
L.Parthasaradhi	1602-23-735-162
N.Sriharsha	1602-23-735-181

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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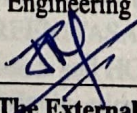


Mr.V.Krishna Mohan
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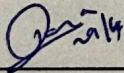
CERTIFICATE

This is to certify that the report entitled **Design of AHB-APB Bridge** submitted by


V.Akshay	1602-23-735-130
J.Krishna Chowdary	1602-23-735-156
M.Vedik	1602-23-735-188

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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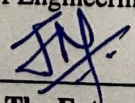


Dr. Ramya R
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CERTIFICATE

This is to certify that the report entitled **Smart camouflage system** submitted by

Mohammed fardin	1602-23-735-153
P.Mourya sai	1602-23-735-154
C.Venkatesh	1602-23-735-190

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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CERTIFICATE

This is to certify that the report entitled **LANDMINE DETECTOR WITH GEOFENCING** submitted by

G.Banendar	1602-23-735-134
K.sushendra varma	1602-23-735-144
R.N.S.S. prasad	1602-23-735-155

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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IBRAHIMBAGH, HYDERABAD-500031



CERTIFICATE

This is to certify that the report entitled **DEVELOPMENT OF FPGA BASED CMOS CONTROLLER FOR IMAGE PROCESSING** submitted by

M.Shreyas 1602-23-735-180
B.Malleswari 1602-23-735-151

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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CERTIFICATE

This is to certify that the report entitled **DESIGN AND IMPLEMENTATION OF ORNITHOPTER** submitted by

V SAI CHARAN GOUD 1602-23-735-316
P GANESH 1602-23-735-317
M LAXMANA CHARY 1602-23-735-318

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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CERTIFICATE

This is to certify that the report entitled **ACCIDENT DETECTION SYSTEM** submitted by

ESHWAR	1602-23-735-137
HARSHITA	1602-23-735-141
VAISHNAVI	1602-23-735-186

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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CERTIFICATE

This is to certify that the report entitled **Smart Agriculture Bot** submitted by

S.Hrushikesh 1602-23-735-142

Ibaad Ghori 1602-23-735-143

V.Mallareddy 1602-23-735-150

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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CERTIFICATE

This is to certify that the report entitled **ENERGY EFFICIENT DYNAMIC STREET LIGHTING SYSTEM** submitted by

P.Gambhir Rao 1602-23-735-138

T.Harika 1602-23-735-139

Y.Sai Ruthwik 1602-23-735-171

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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CERTIFICATE

This is to certify that the report entitled **Spectrum Sensing And Adaptation Using SDR In Cognitive Radio System** submitted by

M.Akshaya **1602-23-735-131**

J.Praneetha Reddy **1602-23-735-163**

K.Sai Surekha **1602-23-735-173**

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

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Assistant Professor – Dept of ECE

Mr.V.Krishna Mohan

Assistant Professor – Dept of ECE

Head of the Department

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Professor and HOD

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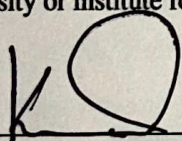


CERTIFICATE

This is to certify that the report entitled **Simulation of UART with Parity Check and Hamming Code Using IPC via Named Pipes** submitted by

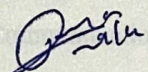
M.Vamcy Krishna 1602-23-735-187
Ujwal Singh 1602-23-735-193

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.



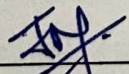
Mr. V. Krishna Mohan
Assistant Professor – Dept of ECE

Supervisors



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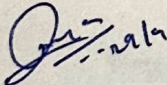
CERTIFICATE

This is to certify that the report entitled **IMPROVEMENT OF INDIAN RFID FOR KAVACH SYSTEM** submitted by

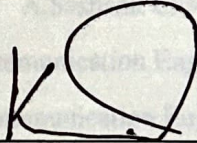
D.Mahesh Nanda	1602-23-735-147
S.Saiteja	1602-23-735-175
A.Sashank Chandra Dev	1602-23-735-176

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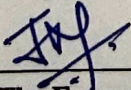


Dr. Ramya R
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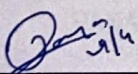
CERTIFICATE

This is to certify that the report entitled **360° UAV Surveillance Glider** submitted by

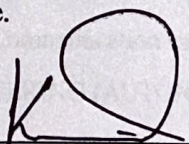
Sai	1602-23-735-166
Sai Bharadhwaj	1602-23-735-169
Sai Saketh	1602-23-735-172

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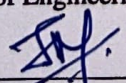


Dr Ramya R
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CERTIFICATE

This is to certify that the report entitled **Automated Biofluid Infusion Surveillance System** submitted by

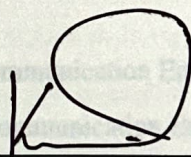
V. Krishna Nandini	1602-23-735-145
D. Nanda Kishore	1602-23-735-158
B. Vinay	1602-23-735-191

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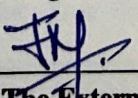


Dr. Rmaya R
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Mr. V. Krishna Mohan
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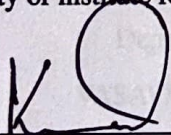
CERTIFICATE

This is to certify that the report entitled **Social Distancing ID card by Edge Computing** submitted by

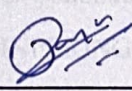
Mahipal choudhary	1602-23-735-148
Vaibhav Tadakamadla	1602-23-735-185
Vishwesh Ittam	1602-23-735-192

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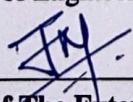


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CERTIFICATE

This is to certify that the report entitled **REAL-TIME AUDIO TRANSMISSION USING SDR WITH ENCRYPTION AND DECRYPTION** submitted by

**Katakam Deveswara Jwalanath 1602-23-735-136
Nitish Mangesh Lingampalle 1602-23-735-161
E.Venkata HarshaVardhan 1602-23-735-189**

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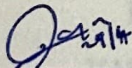
CERTIFICATE

This is to certify that the report entitled **DRY RUN PROTECTION** submitted by

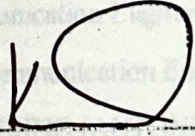
Naveen	1602-23-735-159
Rishikesh	1602-23-735-167
Sai Puneeth	1602-23-735-170

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

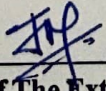


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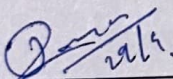
CERTIFICATE

This is to certify that the report entitled **ARTIFICIAL AUDITORY STIMULATION DEVICE WITH C/C++ IMPLEMENTATION** submitted by

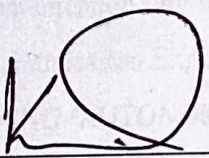
A Sai Vardhan	1602-23-735-174
M Srinivas	1602-23-735-182
V Srivathsa	1602-23-735-183

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic year 2023-2024. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

Supervisors

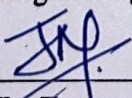


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CERTIFICATE

This is to certify that the Mini Project work titled "Attitude Determination & Visualization of an Aircraft" submitted by

Shaik Rafooz

1602-23-735-178

Velide Shanmukha Srinivas

1602-23-735-179

students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the Bonafide work carried out by them during the academic year 2024-2025. The results embodied in this project report has not been submitted to any other university or institute for the award of any degree.

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APPROVAL SHEET

This thesis entitled "**Development of UART and SPI Protocol Based Firmware Loader for Artix-7 FPGA**" by **C Jayasurya Teja Reddy (1602-23-744-001)** is approved for the degree of **ME (EMBEDDED SYSTEMS AND VLSI DESIGN)**.

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APPROVAL SHEET

This thesis entitled "**DESIGN AND COMPREHENSIVE PERFORMANCE ANALYSIS OF TREEFET AT SUB-5nm TECHNOLOGY NODE**" by **G. Jyoshna Yadav (1602-23-744-002)** is approved for the degree of ME (**EMBEDDED SYSTEMS AND VLSI DESIGN**).

Examiners

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APPROVAL SHEET

This thesis entitled "FPGA IMPLEMENTATION OF LOW-POWER DWT USING REVERSIBLE LOGIC" by Eppa Jyothi Priya(1602-23-744-003) is approved for the degree of ME (EMBEDDED SYSTEMS AND VLSI DESIGN).

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APPROVAL SHEET

This thesis entitled "Design and Performance analysis of CMOS based Ring Oscillator" by Devalapalli Mahathi (1602-23-744-004) is approved for the degree of ME (EMBEDDED SYSTEMS AND VLSI DESIGN).

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APPROVAL SHEET

This thesis entitled "Framework for Image Color Cast Correction and De-fogging to Approximate Image Statistics" by M A MUQTADIR (1602-23-744-005) is approved for the degree of ME (EMBEDDED SYSTEMS AND VLSI DESIGN)

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APPROVAL SHEET

This thesis entitled "Design and Performance Analysis of Nanosheet FET for sub-5nm Technology Node" by Nabihah Abdul Raheem (1602-23-744-006) is approved for the degree of ME (EMBEDDED SYSTEMS AND VLSI DESIGN).

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APPROVAL SHEET

This thesis entitled "Risc V Based Energy Saving Automated Solar Powered Smart Street Lightning System With Object Detection" by **SUNKESULA SHAHAN(1602-23-744-007)** is approved for the degree of ME (EMBEDDED SYSTEMS AND VLSI DESIGN)

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APPROVAL SHEET

This thesis entitled "Refactoring and Optimization of code base in the Robotic Arm subsystem on ZYNQ FPGA" by Syed Ahmed Abdallah is approved for the degree of ME (EMBEDDED SYSTEMS AND VLSI DESIGN).

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APPROVAL SHEET

This thesis entitled "**Exploration of DC and Analog Characteristics in FORK-SHEET FET for nanoscale CMOS Applications**" by **C.Ujwal (1602-23-744-009)** is approved for the degree of **ME (EMBEDDED SYSTEMS AND VLSI DESIGN)**.

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