



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 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

Internal Guide

Dr. Sri Ranganeni Aouthu

Associate Professor

E.C.E Department

E.S.R.
Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

D.B.S.
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” submitted 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

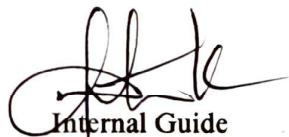
CERTIFICATE

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
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 "**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
E.C.E Department


Internal Guide
Ms. Ch. Neetu Narayan Rao
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 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.Annohya **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.

The signature is written in black ink and appears to read "S. A. Deepthi".
Internal Guide
Dr. S. Aruna Deepthi

Assistant Professor
E.C.E Department

The signature is written in black ink and appears to read "ESR".
Head of the Department
Dr. E. SREENIVASA RAO

Professor and HOD
E.C.E Department

The signature is written in black ink and appears to read "B. J. P." followed by a checkmark.
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 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

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 "**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.Srilekshmi Aouthu

Associate Professor

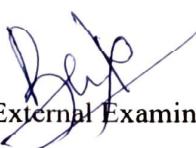
E.C.E Department


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)**

ACCREDITED BY NAAC WITH 'A++' GRADE

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
E.C.E Department


Internal Guide
Mr. B. Uma Mahesh Babu
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 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
Dr. K. Deepti, M.Tech, Ph.D.
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

Date:

CERTIFICATE

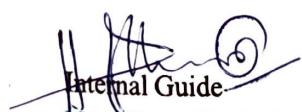
This is to certify that the Project work titled "**IMPLEMENTATION OF SRAM CELL WITH BETTER READ AND WRITE STABILITY WITH MINIMUM AREA**"
submitted by

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
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 "**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. Paavandep **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

The signature is a stylized, handwritten mark.
Internal Guide
Mr. Md. Haffizuddin
Assistant Professor
E.C.E Department

The signature is a stylized, handwritten mark.
Head of the Department
Dr. E. SREENIVASA RAO
Professor and HOD
E.C.E Department

The signature is a stylized, handwritten mark.
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)

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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

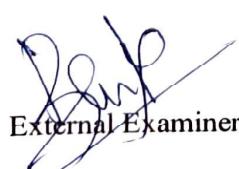


Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department



External Examiner



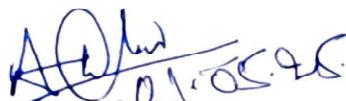
Department of ECE,
Vasavi College of Engineering
ACCREDITED BY NAAC WITH 'A++' GRADE
Ibrahim Bagh, Hyderabad-50072

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.

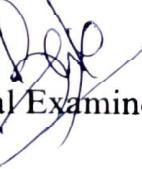


Internal Guide

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

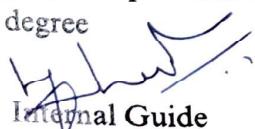
This is to certify that the project work titled "Image to Image conversion using Generative Adversarial Networks" submitted by

Y.Hemantha Jawahar 1602-21-735-015

G.Yogendra 1602-21-735-063

M.Tarun Sai 1602-21-735-052

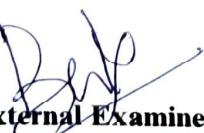
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during the 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)

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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

A handwritten signature in black ink, appearing to read "Sirisha".

Internal Guide

Mrs A B N P Sirisha
Assistant Professor
E.C.E Department

A handwritten signature in black ink, appearing to read "Sreenivasa Rao".

Head of the Department

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

A handwritten signature in black ink, appearing to read "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

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 “ **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

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

[Signature]
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 "**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


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: 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


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


Head of the Department
Dr. E. SREENIVASA RAO
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 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.

[Signature]
Internal Guide

Mr. H. Shravan Kumar
Assistant Professor
E.C.E Department

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

[Signature]
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 "**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

V. Krishnamohan

Internal Guide

V. KRISHNA MOHAN

Assistant Professor

E.C.E Department

E.S.Rao

Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

D. S. J. B.

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 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

A handwritten signature in blue ink, appearing to read "V. Krishna Mohan".

Internal Guide

V.Krishna Mohan

Asistant Professor

E.C.E Department

A handwritten signature in blue ink, appearing to read "Dr. E. Sreenivasa Rao".

Head of the Department

Dr.E. SREENIVASA RAO

Professor and HOD

E.C.E Department

A handwritten signature in blue ink, appearing to read "External Examiner".



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

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

A handwritten signature in black ink, appearing to be 'Uma Mahesh Babu'.

Internal Guide

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

A handwritten signature in black ink, appearing to be 'E.S.Rao'.

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

A handwritten signature in black ink, appearing to be 'Dr. S. Venkateswaran'.

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

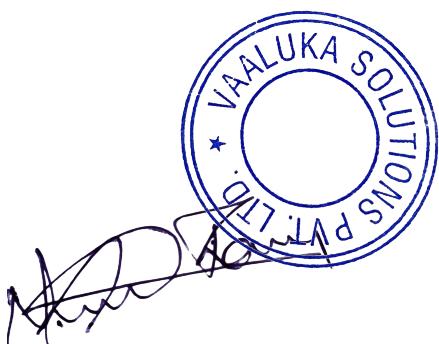
Certificate of Internship Project Completion

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. Hitesh 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 ID:acbf63 72

(Signature)

Name: Dhaval Shiyani

Title: Director & CEO

Date: 14 April,2025



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

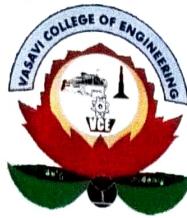

Head of the Department

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


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:

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


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-500 091.



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 24/04/25
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

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

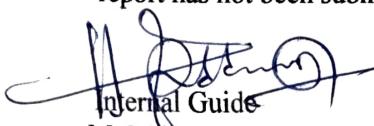
Nikhil Dubbula

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

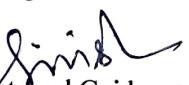
CERTIFICATE

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


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:

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

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.



Vasavi College of Engineering (Autonomous)

Department of Electronics and Communication Engineering

ACCREDITED BY NAAC WITH 'A++' GRADE

IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

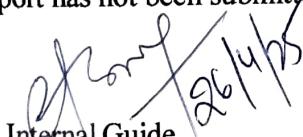
This is to certify that the project work titled " Predictive Analytics with Machine Learning for Fraud Detection of Online Marketing Transactions " submitted by

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


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: 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.

Neetu
Internal Guide

Ch. Neetu

Assistant Professor

E.C.E Department

ESR
Head of the Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

Abdul
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 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. Bharghava
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
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	1602-21-735-311
N Mukesh	1602-21-735-312
Tejasri Vadlakonda	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

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


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 "[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

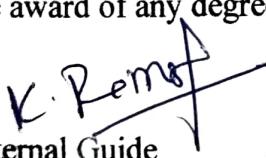
A. Sushma Prashali

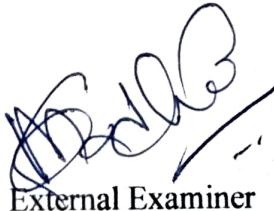
1602-21-735-310

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

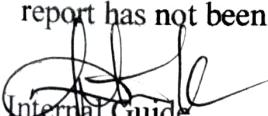
This is to certify that the project report titled "**Image-level oversampling for imbalanced datasets of manufacturing defects**" submitted by

S. Chaitanya Sai **1602-21-735-073**

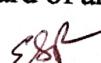
K. Sushanth **1602-21-735-121**

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. Deepthi
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

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.

Signature
External Examiner

Signature
Internal Guide
K.R. DEEPTHI

Assistant professor
E.C.E Department

Signature
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)

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IBRAHIMBAGH, HYDERABAD-500031

Date:

CERTIFICATE

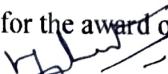
This is to certify that the project seminar report titled "**VIDEO CLASSIFICATION USING DEEPMLEARNING**" submitted by

T Akshar Manoovya **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

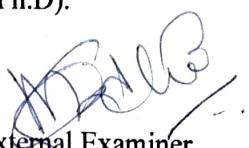
Department of ECE


Head of Department

Dr. E Sreenivasa Rao

Professor and HoD

Department of ECE


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 ““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

E. Sreenivasa Rao

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

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

[Signature]
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: 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**

Prudhviraj.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

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

Padmaja
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: 30.01.2025

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


Head of the Department
Dr. E. SREENIVASA RAO
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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 “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

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

External Examiner

ESR
Head of the Department
Dr.E.SREENIVASA RAO

Professor and HOD
E.C.E Department

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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 "**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

V. K. L. Mohan

Internal Guide

V. Krishna Mohan

Assistant Professor

E.C.E Department

E.S.R.
Head of the Department

Dr. E.SCREENIVASA RAO

Professor and HOD

E.C.E Department

External Examiner

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DEPARTMENT OF E.C.E.
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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 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.POOGA 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


K. Ramakrishna
Supervisor

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)

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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

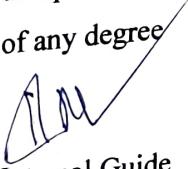
K SHARATH CHANDRA

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

The signature is handwritten in black ink, appearing to read "B.Srinivas Rao".
B.Srinivas Rao
Internal Guide

Assistant Professor
E.C.E Department

The signature is handwritten in black ink, appearing to read "Dr. E.Sreenivasa Rao".
Dr. E.SREENIVASA RAO
Head of the Department
Professor and HOD
E.C.E Department

The signature is handwritten in black ink, appearing to read "External Examiner".



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

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IBRAHIMBAGH, HYDERABAD-500031

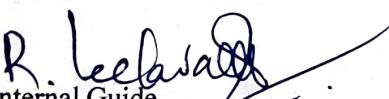
Date:

CERTIFICATE

This is to certify that the project 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.

R. Dulba

Internal Guide

Dr. Vibha Kulkarni

Assistant Professor,

ECE Department

SSR

Head of the Department

Dr. E Srinivas Rao

Professor & HOD

ECE Department

Q. J. J.
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

The signature is handwritten and appears to read "S. Jhansi".

SUPERVISOR

Ms. SAJJANAPU JHANSI NAGA LAXMI

Assistant Professor

E.C.E Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

HEAD OF THE DEPARTMENT

The signature is handwritten and appears to read "U. J. Jhansi".

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)

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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)

ACCREDITED BY NAAC WITH 'A++' GRADE

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. Deepthi

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. R.
Head of the Department

Dr. E. SREENIVASARAO
Professor and HOD
E.C.E Department

Ch
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

CSR

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

E. Sreenivasa Rao

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

Ch
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

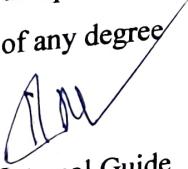
K SHARATH CHANDRA

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 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


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

The signature is handwritten in black ink, appearing to read "B.Srinivas Rao".
B.Srinivas Rao
Internal Guide

Assistant Professor
E.C.E Department

The signature is handwritten in black ink, appearing to read "Dr. E.Sreenivasa Rao".
Dr. E.SREENIVASA RAO
Head of the Department
Professor and HOD
E.C.E Department

The signature is handwritten in black ink, appearing to read "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 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.

R. Dulba

Internal Guide

Dr. Vibha Kulkarni

Assistant Professor,

ECE Department

SSR

Head of the Department

Dr. E Srinivas Rao

Professor & HOD

ECE Department

Q. J. J.
External Examiner



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 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

The signature is handwritten and appears to read "S. Jhansi".

SUPERVISOR

Ms. SAJJANAPU JHANSI NAGA LAXMI

Assistant Professor

E.C.E Department

Dr. E. SREENIVASA RAO

Professor and HOD

E.C.E Department

HEAD OF THE DEPARTMENT

The signature is handwritten and appears to read "U. J. Jhansi".

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 “ 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

CBP

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:

Brao *Ram* **Dr.DMK Chaitanya , K.Rama Krishna Reddy**

Associate professor ,Assistant professor

E.C.E Department

CC
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 “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

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.

Coordinators:

Dr.DMK Chaitanya , K.RamaKrishnaReddy
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

Date: 24/04/25

CERTIFICATE

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

Om Vinod Alatagi	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

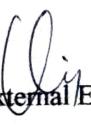

Head of the Department

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 Guides:



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

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	<i>A. Datha Sai</i>
S Rishi Preetham	1602-22-735-049	<i>S. Rishi Preetham</i>
D Kusuma	1602-22-735-302	<i>D. Kusuma</i>

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. External Examiner
HYDERABAD-500 031.

Internal Guides:

Dr. DMK Chaitanya, K. Rama Krishna Reddy
Associate professor, 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

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

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. DMK Chaitanya, K. Rama Krishna Reddy
Associate Professor, Associate Professor
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: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


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. DMK Chaitanya , K. Rama Krishna Reddy
Associate Professor, 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: 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

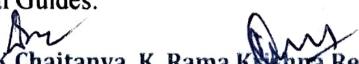
K. Srihitha 1602-22-735-020

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


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 Guides:


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

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

A handwritten signature in black ink, appearing to read "ESR".

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.

A handwritten signature in black ink, appearing to read "D.M.K".

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

A handwritten signature in black ink, appearing to read "K.R.R".

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

A handwritten signature in black ink, appearing to read "C.L.J".
External Examiner



Department of Electronics and Communication Engineering

Vasavi College of Engineering (Autonomous)

ACCREDITED BY NAAC WITH 'A++' GRADE

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 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

A handwritten signature in black ink, appearing to read "S.M.R." or a similar variation.

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.**

A handwritten signature in black ink, appearing to read "A.M." or a similar variation.

Internal Guides:

Dr. DMK Chaitanya, K. Rama Krishna Reddy

**Associate professor, Assistant professor
E.C.E Department**

A handwritten signature in black ink, appearing to read "C. J. M." or a similar variation.

External Examiner



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

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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

D.ARTHI REDDY **1602-22-735-008**

K.BHUVANESHWARI **1602-22-735-012**

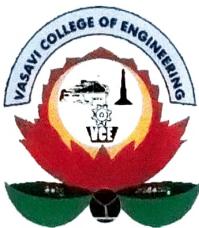
A.MEGNA **1602-22-735-026**

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

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. External Examiner
HYDERABAD-500 031.

Internal Guide
Dr. DMK Chaitanya, K. Rama Krishna Reddy
Associate Professor, 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: 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. Sриja **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 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
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

External Examiner

Co-Ordinator
K. Ramakrishna Reddy
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

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

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

DEPARTMENT OF E.C.E.
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HYDERABAD-500 031.

Co-ordinator
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Associate Professor
E.C.E Department

External Examiner

Co-ordinator
K. Ramakrishna Reddy
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

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

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 “ **FPGA-Based Real-Time AI-Powered Smart Toll Collection System with Vehicle 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

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 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

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

Amr.
Dr. D. M. K. Chaitanya
Associate

Dr. Venkata Krishna Reddy
K. Ravindra
Asst. Prof.



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 "**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

SSR
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.

DR
Coordinator

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

DR
External Examiner

DR
Coordinator

K.Ramakrishna Reddy
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

Date:

CERTIFICATE

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

A.Ar vind **1602-22-735-006**

B.Ar vind **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

A handwritten signature in black ink, appearing to be "Head of the Department".

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:

A handwritten signature in black ink, appearing to be "Co-ordinators".
Dr.DMK Chaitanya , K.Rama KrishnaReddy
Associate professor ,Assistant professor
E.C.E Department

A handwritten signature in black ink, appearing to be "External Examiner".

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 bona fide 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

A handwritten signature in black ink, appearing to read "E.S.R." followed by a stylized surname.

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

A handwritten signature in black ink, appearing to read "Chij" followed by "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 ROBOT using 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

Signature
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.

Signature
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

A handwritten signature in black ink, appearing to read "E&C".

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 Hussain, 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 :

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

A handwritten signature in black ink, appearing to read "Dr. R. RAMYA". The signature is written in a cursive style with a large, distinct "R" at the beginning.

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

A handwritten signature in black ink, appearing to read "Dr. E. SREENIVASA RAO". The signature is written in a cursive style with a large, distinct "S" at the beginning.

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

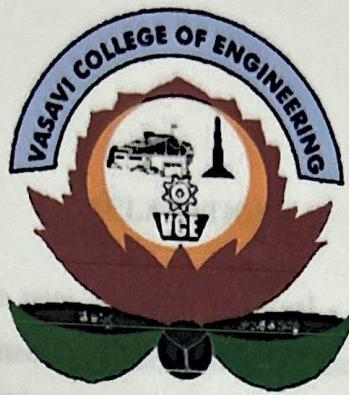
Head of the Department

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

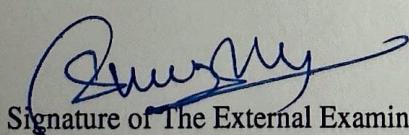
Signature of the Supervisor

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 bona fide 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 "**SAFEPATH NAVIGATION**" submitted by

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

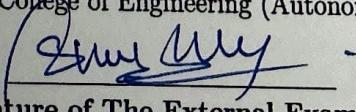
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the academic requirements for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bona fide work carried out by them 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

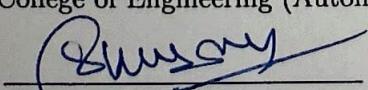
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the academic requirements for the award of the degree of Bachelor of Engineering in Electronics and Communication Engineering is a record of the bonafide work carried out by them during 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

Dr. E. Sreenivasa Rao
Entertd Gramm



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

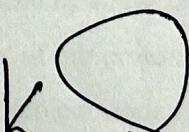
M.Sampath Reddy 1602-22-735-101

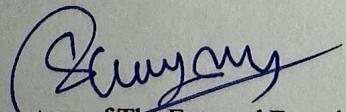
M.Sathwik 1602-22-735-102

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

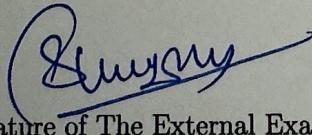
This is to certify that the Theme Based project work titled **FAST GENERATION OF CUSTOM FLOATING POINT SPATIAL FILTER** submitted by

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

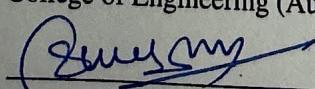
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic 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

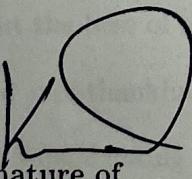
CERTIFICATE

I hereby certify that the work, which is being presented in the project report, entitled Phase locked loop design, 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 february 2025 to ap2024 under the supervision of Mr.V.Krishna Mohan and Dr.R.Ramya.

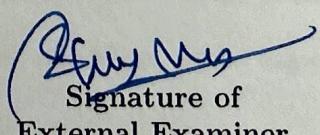
I also cited the reference about the code and information regarding interfacing of Fpga board from where they have been taken.

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

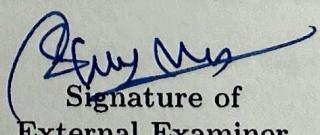
This is to certify that the above statement made by the candidate is correct to the best of my knowledge. The Viva-Voce examination of M.Rishitha ,K.Sahithi,Y.padma priya dharshini BE, ECE Students has been held on 06-05-2025.



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



Signature of
Project Coordinator
Name:Dr.R.Ramya



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

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, Telengana

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

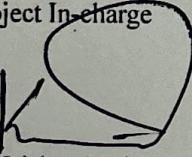
Vasavi College of engineering

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.

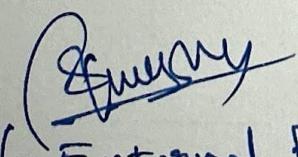
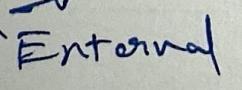
Project In-charge



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)

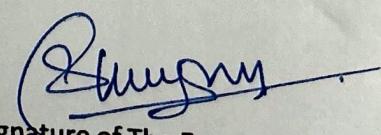
Head of the Department
Dr.E. SREENIVASA RAO

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

Batch C9

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

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 Deepthi

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

COMPARIION 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.MAITHRI 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

IBRAHIMBAGIL, 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	1602-22-735-144
JAVVADI INDRANI	1602-22-735-149
SOUMIYA SOMA	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. 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

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.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

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.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

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

ESR
Head of the Department

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

(CNDuptt)
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 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

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


Internal Guide
DR.A. Srilakshmi

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:

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-500 081.


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

ESR
Head of the Department
E.C.E Department

PROF. & HEAD
DEPARTMENT OF E.C.E.
VASAVI COLLEGE OF ENGG.
HYDERABAD-500 091.

Ch. Durgalal
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

Dr. Srilakshmi Aouthu
Designation : *Asst. 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

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

Chandupati
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 FEROZ **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.

SSR
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

✓
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

A handwritten signature in black ink, appearing to read "E.S.R." or "E.S.Rao".

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.

A handwritten signature in blue ink, appearing to read "Srilakshmi Abuthu".

Internal Guide
Dr. Srilakshmi Abuthu
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.

A handwritten signature in black ink, appearing to read "S. S. S." or a similar initials.

Head of the Department
E.C.E Department

A handwritten signature in blue ink, appearing to read "Vasavi" or a similar name.

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

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

SLA
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.**



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.

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

Dr. Srilakshmi Aouthu
Internal Guide
Dr. SRI LAKSHMI 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-500 081.

Internal Guide


Dr. Srilakshmi Aouthu Asst. 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.

SSR
Head of the Department

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

Internal Guide

W. S. Duggal

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 Narsingipaty **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

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. External Examiner
HYDERABAD-500 081.

SKA
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 Narsingipyta **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

Vasuply
Internal Guide
~~Asst.~~ 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

[Signature]
Internal Guide

[Signature], Designation **Asst. 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 "**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

Axx. Dr. Praveen Kumar
E.C.E Department
Om Prakash

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.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

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.Deepthi

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

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. 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

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

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

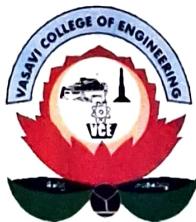
ELECTRONICS AND COMMUNICATION ENGINEERING

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 Bhumesh 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



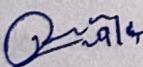
CERTIFICATE

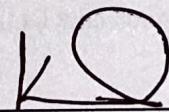
This is to certify that the report entitled **Grass Cutting Robot** submitted by

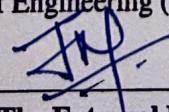
M.Uday Kiran 1602-23-735-184
J.Sai Kiran 1602-23-735-319
S.Anil 1602-23-735-320

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



I wish to record my indebtedness and thankfulness to all who helped me prepare this Project Report titled "Making of Underwater Drone" and present it to you.

I am especially thanked for the guidance and supervision Dr. R.Ramya and Mr.V.Krishna Mohan in the Department of Electronics Communication Engineering for giving me valuable suggestions and help in the preparation of the report.

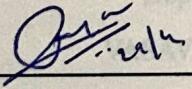
CERTIFICATE

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

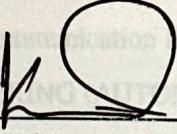
P.Akshaya Reddy 1602-23-735-132
J.Amruth vishal 1602-23-735-133
P.Lohitha Reddy 1602-23-735-146

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

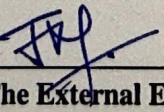


Dr. Ramya.R
Assistant Professor – Dept of ECE



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

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

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
Vasavi College of Engineering (Autonomous)

Signature of The External Examiner

DEPARTMENT OF ECE
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
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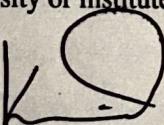


CERTIFICATE

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.



Mr. V. Krishna Mohan

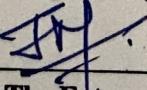
Assistant Professor – Dept of ECE

Supervisors



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Head of the Department
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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. V.Krishna Mohan
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Head of the Department
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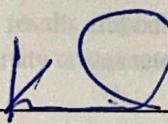
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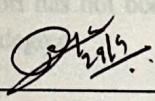
This is to certify that the report entitled **SPACECRAFT HEALTH MONITORING SYSTEM** submitted by

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

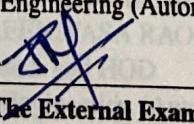
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Assistant Professor – Dept of ECE


Dr. Ramya R
Assistant Professor – Dept of ECE

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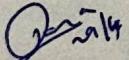
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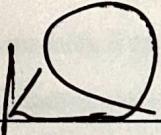
This is to certify that the report entitled **Design of AHB-APB Bridge** submitted by

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

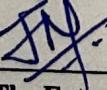
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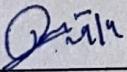
CERTIFICATE

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

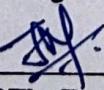
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I would like to express my sincere gratitude to my project guides, Dr. Ramya R and Mr. V. Krishna Mohan, for their valuable guidance and support in the Department of Electronics and Communication. Their continuous support, expert guidance, and valuable feedback throughout the course of this project, "LANDMINE DETECTOR WITH GEOFENCING", have greatly helped shape the completion and success of this work.

CERTIFICATE

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

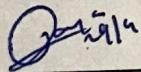
G.Banendar 1602-23-735-134

K.sushendra varma 1602-23-735-144

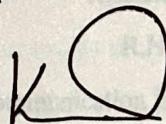
R.N.S.S. prasad 1602-23-735-155

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 bona fide 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

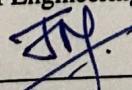


Mr. V.Krishna Mohan
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Head of the Department
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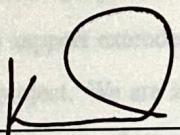
This is to certify that the report entitled **DEVELOPMENT OF FPGA BASED CMOS CONTROLLER FOR IMAGE PROCESSING** submitted by

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

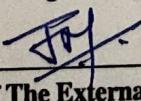
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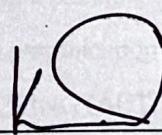
This is to certify that the report entitled **DESIGN AND IMPLEMENTATION OF ORNITHOPTER** submitted by

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

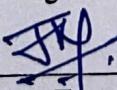
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bona fide work carried out by them during the academic 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

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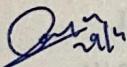
CERTIFICATE

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**

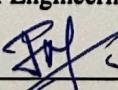
students of Electronics and Communication Engineering Department, Vasavi College of Engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Electronics & Communication Engineering is a record of the bonafide work carried out by them during the academic 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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Assistant Professor – Dept of ECE


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

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Dr.E. SREENIVASA RAO
Professor and HOD
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I would like to express my heartfelt gratitude to my project guides, Dr. Ramya R and Mr. V. Krishna Mohan, Assistant Professors in the Department of Electronics and Communication Engineering, for their continuous support, expert guidance, and valuable feedback throughout the course of this project, "Smart Agriculture Bot." Their inputs greatly helped shape the direction and success of this

CERTIFICATE

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

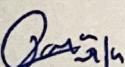
S.Hrushikesh 1602-23-735-142

Ibaad Ghori 1602-23-735-143

V.Mallareddy 1602-23-735-150

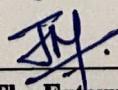
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CERTIFICATE

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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I wish to record my indebtedness and thankfulness to all who helped me prepare this Project Report titled Spectrum Sensing And Adaptation Using SDR In Cognitive Radio System and particularly to my supervisor.

I am especially thankful for my guide and supervisor Mr.V.Krishna Mohan in the Department of Electronics & Communication Engineering for giving me

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.

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Head of the Department

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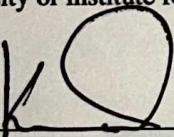


CERTIFICATE

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.



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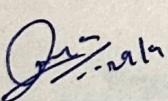
CERTIFICATE

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

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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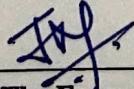


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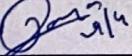
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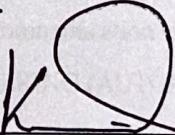
This is to certify that the report entitled **360° UAV Surveillance Glider** submitted by

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

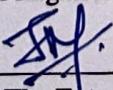
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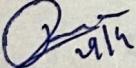
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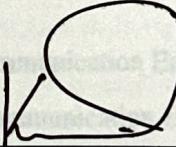
This is to certify that the report entitled **Automated Biofluid Infusion Surveillance System** submitted by

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

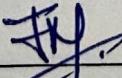
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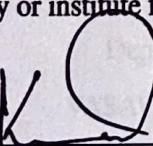
CERTIFICATE

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

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

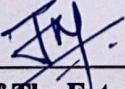


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CERTIFICATE

This is to certify that the report entitled **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

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 bona fide work carried out by them during the academic year 2024-2025. The results embodied in this project report have not been submitted to any other university or institute for the award of any degree.

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I would like to express my sincere gratitude to all those who supported me throughout the development of my project. First and foremost, I extend my thanks to my guide and mentor, Mr. V. Krishna Mohan and Dr. Ramya R, for their valuable guidance, encouragement, and constant support. Their insights and technical advice greatly contributed to the successful completion of this project.

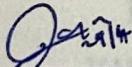
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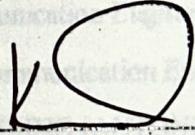
This is to certify that the report entitled **DRY RUN PROTECTION** submitted by

Naveen 1602-23-735-159
Rishikesh 1602-23-735-167
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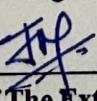
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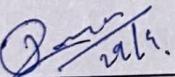
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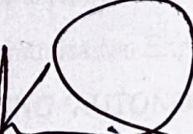
This is to certify that the report entitled **ARTIFICIAL AUDITORY STIMULATION DEVICE WITH C/C++ IMPLEMENTATION** submitted by

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

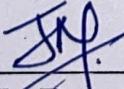
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This is to certify that the Mini Project work titled "Attitude Determination & Visualization of an Aircraft" submitted by

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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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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)**.

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

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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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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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