



# ACADEMIC LIVE PROJECTS



## ELECTRONICS

**MATLAB**

+91 9030 333 433, +91 8776 681 444

**NASSCOM**



startupindia



## LATEST MATLAB ACADEMIC LIVE PROJECTS 2024-2025

S. No	Project Code	Title	Domain
1	TMMAAI321	<p><b>Tomato Quality Classification Based on Transfer Learning Feature Extraction and Machine Learning Algorithm Classifiers</b></p> <p><i>Objective: The study introduces a CNN-SVM hybrid model for tomato quality grading, achieving 97.50% accuracy in binary and 97.54% in multiclass classifications.</i></p>	Image Processing/Artificial Intelligence
2		<p><b>Single Underwater Image Restoration Using Variational Framework Guided by Imaging Model with Noise</b></p> <p><i>Objective: The objective is to enhance underwater image quality by integrating an improved imaging model with noise and variational frameworks for superior contrast, color correction, and noise suppression.</i></p>	Image Processing
3	TMMASP197	<p><b>Lightweight and High Accurate RR Interval Compensation for Signals from Wearable ECG Sensors</b></p> <p><i>Objective: The objective is to develop a lightweight, high-accuracy RRI compensation method for wearable ECG sensors, balancing power consumption and resolution.</i></p>	Signal Processing
4	TMMASP194	<p><b>A Novel ECG Signal Quality Index Method Based on Skewness-MODWT Analysis.</b></p> <p><i>Objective: Develop a novel Signal Quality Index (SQI) method to classify and optimize ECG signals for wearable devices, enhancing accuracy and efficiency.</i></p>	Signal Processing
5		<p><b>A Morphology-Preserving Algorithm for Denoising of EMG-Contaminated ECG Signals</b></p> <p><i>Objective: Develop a novel iterative regeneration method to efficiently suppress EMG noise in ECG signals, preserving diagnostic information.</i></p>	Signal Processing
6		<p><b>Online Low-Light Sand-Dust Video Enhancement Using Adaptive Dynamic Brightness Correction and a Rolling Guidance Filter</b></p> <p><i>Objective: To enhance low-light sand-dust videos, an adaptive dynamic brightness correction and rolling guidance filter improve contrast, illumination, and noise reduction.</i></p>	Image Processing
7	TMMAAI332	<p><b>Lumbar Disease Classification Using an Involutional Neural Based VGG Nets (INVGG)</b></p> <p><i>Objective: The objective is to classify lumbar diseases accurately using an advanced INVGG network that combines involutional layers with a modified VGG structure, enhancing diagnostic precision in medical imaging.</i></p>	Image Processing/Artificial Intelligence
8	TMMAWS94	<p><b>Wireless Sensor Network (WSN) Model Targeting Energy Efficient Wireless Sensor Networks Node Coverage</b></p> <p><i>Objective: Designing and improving energy-efficient coverage methods for wireless sensor networks using the improved gray wolf algorithm to optimize node deployment.</i></p>	Communication
9		<p><b>Millimeter-Wave Massive MU-MIMO Performance Analysis for Private Underground Mine Communications</b></p> <p><i>Objective: This article evaluates mmWave massive MU-MIMO channel characteristics in an underground mine, emphasizing path loss, time dispersion, and spectral efficiency.</i></p>	Communication

10		<p><b>A Novel Transfer Learning Approach for Detection of Pomegranates Growth Stages</b>  <i>Objective: The objective is to develop an efficient approach for early detection of pomegranate growth stages using transfer learning and machine learning techniques, achieving 98% accuracy.</i></p>	Image Processing/Artificial Intelligence
11		<p><b>A Novel Framework for Vehicle Detection and Tracking in Night Ware Surveillance Systems</b>  <i>Objective: To enhance nighttime vehicle detection and tracking, our model employs MIRNet for image enhancement and YOLO with SIFT for accurate tracking.</i></p>	Image Processing/Artificial Intelligence
12	TMMAAI326	<p><b>Neural Network-Based Image Processing for Vitamin Deficiency Detection Using CNN</b>  <i>Objective: This project uses CNNs to detect vitamin deficiencies through image analysis of body parts, enabling early diagnosis and accurate intervention.</i></p>	Image Processing/Artificial Intelligence
13	TMMASP199	<p><b>Improving SNR, MSE and Denoising of EMG-Contaminated ECG Signals using EMD</b>  <i>Objective: This study aims to enhance ECG clarity by using Empirical Mode Decomposition (EMD) to effectively suppress EMG noise without significant signal distortion.</i></p>	Signal Processing
14	TMMACO137	<p><b>Performance Analysis of Millimeter-Wave Massive MU-MIMO with 128 Base-Station Antennas for Private Underground Mine Communications</b>  <i>Objective: To assess MU-MIMO mmWave channel performance in underground mines, focusing on path loss, delay spreads, coherence bandwidth, and capacity at 28 GHz.</i></p>	Communication



## ACADEMIC LIVE PROJECTS



# ELECTRONICS

Embedded Systems

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S. No	TITLE	DOMAIN
1.	<p><b>IoT-Enhanced Transport and Monitoring of Medicine Using Sensors, MQTT, and Secure Short Message Service</b></p> <p>The main objective of this project is to enhance the transport and monitoring of medicine using IoT sensors, MQTT protocol for data transmission, and a secure Short Message Service (SMS) for real-time alerts and updates.</p>	IOT
2.	<p><b>IoT Based Electrical Vehicle Battery Management System with Charge Monitor and Fire Protection</b></p> <p>The objective of this project is to develop an IoT-based Electrical Vehicle Battery Management System (EVBMS) with integrated charge monitoring and fire protection capabilities. This system aims to enhance battery safety, extend lifespan, and optimize charging efficiency through real-time monitoring and preemptive fire safety measures.</p>	IOT
3.	<p><b>Advancing Workplace Safety with IoT-Enabled Industrial Monitoring</b></p> <p>The objective of this project is to advance workplace safety by deploying IoT-enabled industrial monitoring systems. Through the integration of IoT sensors and data analytics, the system will enable enhanced real-time monitoring of environmental conditions and machinery operations. This initiative aims to mitigate accidents and elevate safety standards across industrial workplaces.</p>	IOT
4.	<p><b>Sewage Water Monitoring and Filtering using Raspberry Pi</b></p> <p>The main objective of this project is to develop a sewage water monitoring and filtering system using Raspberry Pi. This system aims to continuously monitor water quality parameters, detect contaminants, and automate filtration processes to improve sewage treatment efficiency and environmental sustainability.</p>	WSN
5.	<p><b>Smart Water Flow and Pipeline Leakage Detection using IoT</b></p> <p>The main objective of this project is to implement a smart water flow monitoring system using IoT to detect and alert pipeline leakages, thereby optimizing water management and reducing wastage.</p>	IOT
6.	<p><b>Drivers Real time Drowsiness, Attention Detection and Alarm System using Eye Aspect Ratio(EAR) Analysis</b></p> <p>The main objective of this project is to develop a real-time drowsiness and attention detection system for drivers using Eye Aspect Ratio (EAR) analysis, aiming to enhance road safety through timely alerts and interventions.</p>	Machine learning

7.	<p><b>An Evaluation of LoRaWAN and WLAN for IoT-based Photovoltaic Microgrid Monitoring</b></p> <p>The main objective of this project is to assess LoRaWAN and WLAN technologies for monitoring IoT-based solar microgrids, focusing on their reliability, coverage, and energy efficiency.</p>	WSN
8.	<p><b>IoT and Machine Learning-Based Smart Soil Irrigation Farming Systems</b></p> <p>The main objective of this project is to design and implement IoT and machine learning-driven systems for precision soil irrigation in agriculture. This aims to enhance water efficiency, monitor soil conditions, and maximize crop productivity through automated decision-making.</p>	Machine learning
9.	<p><b>Smart Helmet for Riders to Avoid Accidents Using IoT</b></p> <p>The main objective of this project is to develop a smart helmet integrated with IoT technology to enhance rider safety by providing real-time hazard detection and accident prevention alerts, thereby reducing the risk of accidents on the road.</p>	IOT
10.	<p><b>Design and Implementation of RF Based War Spying Robot with Wireless Night Vision Camera</b></p> <p>The main objective of this project is to design and implement a war spying robot equipped with RF communication and a wireless night vision camera system. This aims to enable remote surveillance in challenging environments, enhancing situational awareness and operational capabilities in military or security applications.</p>	Robotics
11.	<p><b>IoT-Enabled Advanced Water Quality Monitoring System for Pond Management and Environmental Conservation</b></p> <p>The main objective of this project is to develop a system for analyzing the water quality of ponds to detect hazardous substances and pollutants, and then upload this data to an IoT platform. This integration aims to enable real-time monitoring and remote management, facilitating prompt responses to water quality issues for environmental conservation and public health protection.</p>	IOT
12.	<p><b>IoT-enabled Moving Wheelchair with Obstacle Detection and Continuous Health Monitoring</b></p> <p>The main objective of this project is to design an IoT-enabled wheelchair equipped with obstacle detection for safe navigation and continuous health monitoring capabilities. Additionally, integrating control via Google Assistant</p>	Biomedical

	aims to provide enhanced accessibility and autonomy for users with mobility challenges.	
13.	<p><b>LPG Transport Tracking and Leakage Detection with Accident Prevention Alert System</b></p> <p>The main objective of this project is to create a system for tracking LPG transport, detecting leaks, and issuing accident prevention alerts through buzzer and message notifications. This ensures immediate response to potential hazards, improving safety in LPG transportation and distribution operations.</p>	Embedded Applications
14.	<p><b>Remote Monitoring of Hazardous Environment at Mining Sites Using LoRa Network</b></p> <p>The main objective of this project is to implement a LoRa-based system for remote monitoring of hazardous conditions at mining sites. It includes continuous detection of dangers and sending real-time alert messages, while also uploading data to ThingSpeak for centralized monitoring and analysis.</p>	WSN
15.	<p><b>An IoT based Real Time Forest Fire Detection &amp; Alerting System Using LoRa Communication</b></p> <p>The main objective of this project is to implement an IoT-based real-time forest fire detection and alerting system using LoRa communication. This involves transmitting fire data via a LoRa transmitter for reception by a LoRa receiver, enabling immediate actions to be taken to prevent and manage forest fires effectively.</p>	WSN
16.	<p><b>LoRa - Powered Smart Agriculture System for Monitoring and Controlling</b></p> <p>The main objective of this project is to deploy a LoRa-powered smart agriculture system for monitoring and controlling farms. This includes detecting soil moisture levels and transmitting data from a transmitter to a receiver, enabling automated actions such as activating pumps for efficient irrigation management.</p>	WSN
17.	<p><b>Tracking and Monitoring Cattle's Health using Wireless Sensor Networks</b></p> <p>The main objective of this project is to implement a wireless sensor network for tracking and monitoring the health of cattle. Sensor data will continuously monitor health indicators, enabling prompt action in case of anomalies, and notifying authorities via GSM messages for immediate intervention and care.</p>	Biomedical
18.	<p><b>Smart Aquaponics and Hydroponics Monitoring Using IoT</b></p> <p>The main objective of this project is to develop an IoT-based system for smart monitoring of aquaponics and hydroponics. This includes automating water transfer between pond and land based on need, activating pumps as required, and uploading real-time data to ThingSpeak for comprehensive monitoring and management of water resources in agricultural settings.</p>	IOT

19.	<p><b>Intelligent Control Shed Poultry Farm System Incorporating With Machine Learning</b></p> <p>The main objective of this project is to create an intelligent control system for poultry farms integrating machine learning. Gas sensors will monitor poultry conditions, and machine learning algorithms will analyze sensor data in real-time. If abnormal conditions are detected, the system will trigger alerts via a buzzer or GSM message, ensuring prompt action to maintain poultry health and welfare.</p>	Machine learning
20.	<p><b>Automatic Licence Plate Detection and Recognition System using Image Processing Techniques</b></p> <p>The main objective of this project is to develop an automatic license plate detection and recognition system using image processing techniques. This system will use cameras to detect license plates, verify their correctness, and grant entry based on valid plate recognition, enhancing security and efficiency in access control scenarios.</p>	OpenCV
21.	<p><b>Air Quality Prediction and Analysis using Machine Learning</b></p> <p>The main objective of this project is to predict and analyze air quality using machine learning. Sensors such as MQ6, MQ2, and PMS will detect air quality parameters, and machine learning algorithms will process the data. If the processed data indicates poor air quality, the system will issue alerts, enabling timely responses to potential environmental hazards and ensuring public health safety.</p>	Machine learning
22.	<p><b>Implementation of a Wireless Human Hand Gesture Controlled Robotic Arm</b></p> <p>The main objective of this project is to implement a wireless human hand gesture-controlled robotic arm using flex sensors. Movements detected by the flex sensors on the human hand will be replicated by the robotic arm, enabling intuitive and precise control for various applications such as prosthetics or industrial manipulation tasks.</p>	Robotics
23.	<p><b>Car Black Box System for Accident Analysis using IoT</b></p> <p>The main objective of this project is to create a car black box system using IoT for accident analysis. In case of an accident, the system will send a message through GSM and upload relevant data to ThingSpeak. This aims to provide immediate alerting and comprehensive data collection for accident reconstruction and analysis.</p>	IOT
24.	<p><b>Virtual Eye: Object Recognition for Blind</b></p> <p>The main objective of this project is to develop "Virtual Eye," an object recognition system for the blind using a webcam. The system will utilize the webcam to detect objects, and a speaker will verbally announce the names of detected objects in real-time, enhancing accessibility and independence for visually impaired individuals.</p>	OpenCV
25.	<p><b>Development of a Sign Language Translator Based on Gestures-To-Words Using IoT</b></p> <p>The main objective of this project is to develop a sign language translator using IoT based on gestures-to-words. Each finger will have flex sensors to interpret</p>	IOT



	gestures, allowing translation between English and regional languages such as Telugu and Tamil. The translated words will be spoken aloud by a speaker, facilitating communication for individuals using sign language and promoting inclusivity.	
26.	<p><b>A Hybrid IoT and Machine Learning Approach for Crop Recommendation Using a Voting Ensemble Model</b></p> <p>The main objective is to utilize IoT sensors to measure essential crop parameters, process this data through machine learning algorithms like a Voting Ensemble Model, and provide real-time recommendations on whether the conditions are suitable ("good") or unsuitable ("bad") for optimal crop growth, ensuring timely alerts for necessary actions.</p>	Machine Learning
27.	<p><b>IoT-Based Smart Kitchen with Enhanced and Automated Safety Measures</b></p> <p>The main objective is to implement an IoT-based smart kitchen with automated safety measures, including monitoring cylinder weight and detecting fires, with data uploaded to ThingSpeak for real-time analysis and actionable alerts, ensuring enhanced safety and efficiency in kitchen operations.</p>	IOT
28.	<p><b>SDIoT Park : A Data Analytics Framework for Smart Parking Using SDN-Based IoT</b></p> <p>The main objective is to develop SDIoT Park, a data analytics framework for smart parking using SDN-based IoT, where vehicles can efficiently find parking spaces by checking real-time availability on ThingSpeak. This system aims to optimize parking management, reduce congestion, and enhance user convenience through IoT integration and data-driven decision-making.</p>	IOT
29.	<p><b>A Smart Bin with Real-Time Monitoring and Garbage Level Tracking Using IoT</b></p> <p>The main objective is to create a smart bin system that utilizes IoT for real-time monitoring and garbage level tracking. By measuring dust percentage using ultrasonic and IR sensors, detecting debris, and using a servo mechanism to sort waste into wet or dry bins, the system aims to optimize waste management efficiency. Data from the smart bin will be uploaded to ThingSpeak for continuous monitoring and analysis, facilitating timely waste collection and resource allocation.</p>	IOT
30.	<p><b>Over-Crowd Avoiding In Transportation With Face Detection Using Raspberry pi</b></p> <p>The main objective is to implement a system for overcrowd avoidance in transportation using Raspberry Pi and face detection technology. When the camera detects overcrowding through face detection, it triggers a GSM module to send real-time alerts to authorities, ensuring prompt action to manage crowd levels effectively and enhance passenger safety.</p>	OpenCV
31.	<p><b>An AI-Based Ventilation KPI Using Embedded IoT Devices</b></p> <p>The objective of this project is to develop an AI-based ventilation KPI system using embedded IoT devices, which integrates temperature, humidity, and air</p>	IOT

	quality sensors to continuously monitor and analyze indoor air conditions. The system leverages machine learning algorithms to optimize ventilation performance and provide actionable insights for improving indoor air quality.	
32.	<p><b>Anomaly Detection in Industrial Air Conditioners in Hangars With Aircraft Spare Parts</b></p> <p>The objective of this project is to implement an anomaly detection system for industrial air conditioners in aircraft hangars by using temperature, humidity, and vibration sensors to monitor system performance. The system applies machine learning algorithms to analyze sensor data and identify deviations, ensuring timely maintenance and preventing potential failures.</p>	Embedded Applications
33.	<p><b>Emphasize The Health Benefits Of Improved Air Quality With Mini Ozone Generator In Trains</b></p> <p>The objective of this project is to enhance air quality in trains using a mini ozone generator, combined with air quality sensors to monitor and control ozone levels and particulate matter. This system aims to improve passenger health by reducing airborne contaminants and maintaining a cleaner, healthier environment within train compartments.</p>	Embedded Applications
34.	<p><b>Digital Twin for Smart Building Management System</b></p> <p>The objective of this project is to create a digital twin for smart building management using DHT11 sensors for temperature and humidity, IR sensors for human detection, and current and voltage sensors for monitoring energy consumption from a 12V battery. This system aims to optimize building operations and enhance energy efficiency by providing real-time insights and control.</p>	Machine learning
35.	<p><b>FertiForecast: Identification of Fertilizer Based on NPK Levels using Machine Learning Algorithms</b></p> <p>The objective of the FertiForecast project is to optimize fertilizer application using machine learning algorithms to analyze NPK sensor data and soil moisture levels. The system processes this data to recommend the precise type and amount of fertilizer required and automatically activates the water pump as needed, ensuring optimal soil conditions. This approach enhances crop growth and resource efficiency by customizing fertilization and irrigation practices based on real-time soil data and predictive analytics.</p>	Machine Learning
36.	<p><b>Machine Learning based Assessment of Mental Stress using Wearable Sensors</b></p>	Machine Learning

	The main objective of the project is to assess mental stress levels using wearable sensors, such as heart rate monitors and galvanic skin response (GSR) sensors. By applying machine learning algorithms to the data collected from these wearable sensors, the project aims to accurately evaluate mental stress and provide actionable insights to help manage and reduce stress.	
37.	<p><b>VanyaRakshak: Intelligent System Approach to Intrusion Detection in Rainforest</b></p> <p>The objective of the VanyaRakshak project is to develop an intelligent intrusion detection system for rainforests using PIR sensors for motion detection and a USB webcam for real-time monitoring. The Raspberry Pi processes the data, and if motion is detected or unauthorized activity is identified, the system sends alerts via a GSM module.</p>	openCV
38.	<p><b>A Lightweight Wearable Fall Detection System using Gait Analysis for Elderly</b></p> <p>The main objective of the project is to create a lightweight wearable fall detection system for the elderly using gait analysis. By utilizing sensors such as the ADXL345 accelerometer, the system aims to detect falls accurately and promptly send a message with the GPS location to a designated phone number, ensuring timely assistance and improving the safety of elderly individuals.</p>	Arduino
39.	<p><b>A Novel Embedded System for Real-Time Fault Diagnosis of Photovoltaic Modules</b></p> <p>The objective of the project is to develop an embedded system for real-time fault diagnosis of photovoltaic modules using temperature sensors, voltage sensors, and current sensors. The system processes sensor data to identify and diagnose faults in photovoltaic modules, ensuring efficient operation and timely maintenance.</p>	Embedded Applications
40.	<p><b>IoT-Enabled Horticultural Lighting for Optimizing Plant Growth and Agriculture Operations</b></p> <p>The objective of the IoT-Enabled Horticultural Lighting project is to enhance plant growth and agricultural efficiency by using sensors to monitor soil moisture, fire risks, and light conditions. The system automates irrigation, detects fire hazards, and adjusts lighting based on sensor inputs, with all data uploaded to ThingSpeak and critical alerts sent via GSM. This integration ensures responsive and optimal management of horticultural operations.</p>	IOT
41.	<p><b>Exploring Vulnerabilities: Analyzing Malfunctions and security Breaches in Electronic Voting Machines</b></p>	openCV

	<p>The main objective of the project is to identify and analyze vulnerabilities, malfunctions, and security breaches in electronic voting machines. This will be achieved using a Raspberry Pi for real-time monitoring with cameras and sensors like temperature, vibration, and tamper detection. If unauthorized access is detected, a message will be sent through a GSM module to alert security personnel.</p>	
42.	<p><b>Lifi based real time under water board casting from optimal data rates and lower Power consumption</b></p> <p>The objective of the LiFi-based underwater broadcasting project is to enable real-time data transmission in aquatic environments with optimal data rates and low power consumption. By using different LEDs to indicate various types of data being sent and activating a buzzer at the receiver side to signal data reception, the system ensures clear and efficient underwater communication.</p>	WSN
43.	<p><b>Research on Self-Powered Rainfall Sensor Suitable for Landslide Monitoring Based on Triboelectric Nanogenerator</b></p> <p>The main objective of the research is to design and implement a self-powered rainfall sensor for landslide monitoring, using a triboelectric nanogenerator (TENG) to power the sensor and measure rainfall intensity. This sensor will continuously provide critical data on precipitation levels to improve early warning systems for landslide risk assessment.</p>	Arduino
44.	<p><b>Networked MEMS pressure sensor design to detect pore water pressure for landslide monitoring</b></p> <p>The objective of the project is to design a networked MEMS pressure sensor system to monitor pore water pressure and soil moisture for landslide detection. This system uses MEMS pressure sensors to measure pore water pressure and soil moisture levels. The collected data is transmitted wirelessly to a central unit for real-time analysis. If the system detects conditions indicative of a landslide, it sends an alert via a GSM module and activates a buzzer to provide immediate warning and facilitate timely mitigation efforts.</p>	Embedded Applications
45.	<p><b>Battery Health Management Based on Digital Twin Technology</b></p> <p>The objective of the project is to develop a battery health management system using digital twin technology, incorporating sensors such as temperature sensors, voltage sensors, and current sensors to monitor battery performance. The digital twin model processes this data to simulate and analyze battery health in real time, enabling predictive maintenance and optimization of battery lifespan.</p>	Machine learning
46.	<p><b>AI and Digital Twins Transforming Healthcare IoT</b></p>	IOT

	<p>The objective of the project is to use AI and digital twin technology to transform healthcare IoT by integrating Dallas temperature sensors, heartbeat sensors, and BMP180 sensors to monitor vital signs and environmental conditions. The system analyzes this data in real-time, sends alerts via a GSM module if any abnormalities are detected, and transmits the values to an IoT platform for comprehensive health monitoring and management.</p>	
47.	<p><b>AQUATWIN: A Digital Twin Framework for Early Detection of Water Contamination</b></p> <p>The objective of the AQUATWIN project is to create a digital twin framework for early detection of water contamination by integrating pH sensors, turbidity sensors, and TDS sensors to monitor water quality. The system processes sensor data using machine learning algorithms to predict contamination, and sends alerts via a GSM module if any problematic values are detected.</p>	Machine Learning
48.	<p><b>AI-Driven Driver Behaviour Assessment Through Vehicle and Health Monitoring</b></p> <p>The main objective of the project is to enhance driver safety by assessing behavior and health through real-time monitoring, utilizing heartbeat and temperature sensors, a drowsiness-detecting camera, and emergency push button integration, with alerts sent via GSM and buzzer activation for abnormalities.</p>	OpenCV
49.	<p><b>Optimizing Structural Health Monitoring Systems Through Integrated Fog and Cloud Computing Within IoT Framework</b></p> <p>The main objective of this project is to optimize structural health monitoring systems by integrating fog and cloud computing within an IoT framework, using heartbeat and Dallas temperature sensors alongside RFID cards to upload individual health details to the ThingSpeak IoT webserver. The system will trigger alerts via GSM messaging if any health metrics exceed predefined thresholds.</p>	IOT
50.	<p><b>Outdoor VOCs' Concentration Monitoring Due to Traffic Emission</b></p> <p>The main objective of the project is to monitor outdoor VOCs' concentrations due to traffic emissions by continuously measuring air quality, gas, and smoke levels with specialized sensors. Data is sent to ThingSpeak for ongoing</p>	WSN

monitoring, and alerts are issued via GSM if thresholds are exceeded, with information transmitted from a Zigbee transmitter to a receiver for traffic police.	
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PROJECT SUPPORTS FOR STUDENTS:

- ❖ PROJECT ABSTRACT
- ❖ PROJECT IEEE BASE PAPER/ REFERENCE PAPER
- ❖ PROJECT PRESENTATION IN PPT FORMAT
- ❖ PROJECT REVIEW ASSISTANCE FOR VIVA
- ❖ PROJECT DIAGRAMS
- ❖ PROJECT SOURCE CODE
- ❖ PROJECT REPORT
- ❖ PROJECT SCREEN SHOTS
- ❖ PROJECT DEMO
- ❖ PROJECT EXPLANATION
- ❖ PLAGARISM DOCUMENTATION
- ❖ INTERNATIONAL JOURNAL/CONFERENCE PUBLISHING
- ❖ PROJECT ACCEPTANCE LETTER
- ❖ PROJECT COMPLETION CERTIFICATE

## VLSI

S.No	Project Code	Project Name
1	TVMABE252	A Single Ring-Oscillator-Based Test Structure for Timing Characterization of Dynamic Circuit
2	TVMABE251	16-Bit Carry Look-Ahead Adder: Design and Layout with Cadence Tools Top of Form (Back End Domains / Transistor Logic)
3	TVPGOT07	A Lightweight Image Encryption Algorithm Based on Secure Key Generation (Others / Matlab Interfacing)
4	TVMAFE615	Decoder Reduction Approximation Scheme for Booth Multipliers (Front End Domains / Testing)
5	TVPGFE338	Analysis of an Efficient Fault Tolerant Linear Feedback Shift Register for Low Power Applications (Front End Domains / Arithmetic Core)
6	TVPGFE339	Analysis of an Efficient Fault Tolerant Linear Feedback Shift Register for Low Power Applications (Front End Domains / Communications and Crypto Core)
7	TVMAFE609	A New Input Grouping and Sharing Method to Design Low Complexity FFT Implementation (Front End Domains / Finite State Machines )
8	TVMAFE610	A New Input Grouping and Sharing Method to Design Low Complexity FFT Implementation (Front End Domains / FPGA)
9	TVMAFE611	A New Input Grouping and Sharing Method to Design Low Complexity FFT Implementation (Front End Domains / DSP Core)
10	TVMAFE612	A New Input Grouping and Sharing Method to Design Low Complexity FFT Implementation (Front End Domains / Arithmetic Core)
11	TVMAFE613	A New Input Grouping and Sharing Method to Design Low Complexity FFT Implementation (Front End Domains / Testing)
12	TVPGOT06	A Low Cost FPGA Implementation of Retinex Based Low-Light Image Enhancement Algorithm (Others / Matlab Interfacing)
13	TVMAFE608	Analysis of an Efficient Fault Tolerant Linear Feedback Shift Register for Low Power Applications (Front End Domains / FPGA)
14	TVPGBE169	The hybrid full adder following circuit XOR gate and 2:1 multiplexer using pass transistor along with PFAL adiabatic logic style and 32-bit adders (Back End Domains / Transistor Logic)
15	TVMABE246	DESIGN AND ANALYSIS OF LOW-POWER AND AREA EFFICIENT MASTER-SLAVE FLIP-FLOP (Back End Domains / Transistor Logic)
16	TVMABE241	A Benchmark of Cryo CMOS Embedded SRAM DRAMs in 40 nm CMOS (Back End Domains / Core Memories )

VLSI

S.No	Project Code	Project Name
17	TVMAFE614	Decoder Reduction Approximation Scheme for Booth Multipliers (Front End Domains / FPGA)
18	TVMABE249	16-Bit Carry Look-Ahead Adder: Design and Layout with Cadence Tools Top of Form (Back End Domains / Cadence EDA)
19	TVMABE250	16-Bit Carry Look-Ahead Adder: Design and Layout with Cadence Tools Top of Form (Back End Domains / Low Power VLSI)
20	TVMABE255	Design and Study the Performance of a CMOS-Based Ring Oscillator Architecture for 5G Mobile Communication (Back End Domains / Transistor Logic)
21	TVMABE253	Design and Study the Performance of a CMOS-Based Ring Oscillator Architecture for 5G Mobile Communication (Back End Domains / Cadence EDA)
22	TVMABE254	Design and Study the Performance of a CMOS-Based Ring Oscillator Architecture for 5G Mobile Communication (Back End Domains / Low Power VLSI)



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**Surekha**  
5.0 ★★★★★

5 star to the company for its outstanding support, new technology & support



**Shahed**  
4.5 ★★★★★

Very nice project support, the explanation with the kit were very useful and easy to understand...



**Madhu Sudan Reddy**  
5.0 ★★★★★

You guys always come up with exciting new technologies...impressive!! Keep it up...

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1-5-558, 1st Floor, 2nd Street, Balaji Colony,  
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