



## ACADEMIC LIVE PROJECTS 2022-23

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**G R O U P**

# ELECTRONICS

- ✓ **Embedded Systems**
- ✓ **MATLAB**
- ✓ **VLSI & more**

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### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
1	TEMBMA3379	Solar Based E-Uniform for Soldiers (Domains / Embedded applications)	The main objective of this project is to maintain constant health parameter by representing through Cooling fan and peltier module
2	TEMBMA3378	Internet of Things-based Photovoltaics Parameter Monitoring System Using NodeMCU (Domains / Embedded applications)	The main objective of this project is to get the values of parameters and uploading through the web server
3	TEMBMA3377	A Prototype of an Arduino-based Protection System to Overcome Voltage Fluctuations (Domains / Embedded applications)	The main objective of this project is to protect the Electrical system from Over voltages as well as Under voltages by Turning OFF the Load connected to the system
4	TEMBMA3376	Automatic Pet Feeding System Using Google Assistant and Node MCU (Domains / Embedded applications)	The main objective of this project is to create a system for feeding pet with Google Assistant with Node MCU controller
5	TEMBMA3364	Vision Based Parking Occupation Detecting With Embedded AI Processor (Domains / Arduino+Python)	The main objective of this project is to detect the parking slot availability using Camera and Processor through Python
6	TEMBMA3375	Monitoring Social Distancing and Crowd Through Camera for Preventing Reducing COVID Spread (Domains / Arduino+Python)	The main objective of this project is to detect whether crowd is maintaining social distance or not through Camera
7	TEMBMA3374	High Protection Voice Identification Based Bank Locker Security System (Domains / Arduino+Python)	The main objective of this project is to provide high protection to bank locker through Voice identification and face recognition
8	TEMBMA3373	Smart Device for Blind People (Domains / Arduino+Python)	The main objective of this project is to know the object in front of blind person by object detection and to send location of person when feels panic
9	TEMBMA3372	IOT and Deep Learning Based Approach for Rapid Screening & Face Mask Detection for Infection Spread Control (Domains / Arduino+Python)	The main objective of this project is to detect face mask and measure temperature for controlling spread of virus
10	TEMBMA3371	Real Time Application For Vehicle Anti-Theft Detection And Protection With Shock Using Facial Recognition And Mail Notification (Domains / Arduino+Python)	The main objective of this project is to protect the vehicles from thieves by using face recognition and sends the alerts through mail along with Shock Mechanism if someone trying to steal the vehicle.
11	TEMBMA3370	Object Detection Using IOT and ML to Avoid Accident & Improve Road Safety (Domains / Arduino+Python)	The main objective of this project is to detect objects by using YOLO algorithm through Python to provide Road safety

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12	TEMBMA3369	Memory Management and Security Surveillance in CCTV Footage (Domains / Arduino+Python)	The main objective of this project is to provide Surveillance security without human efforts and storing the video in mail
13	TEMBMA3367	Fire Detection and Control System Using Arduino and Webcam (Domains / Arduino+Python)	The main objective of this project is to detect the fire using Webcam and control it through Pump motor
14	TEMBMA3368	IOT Based Baby Monitoring System for Smart Cradle (Domains / Arduino+Python)	The main objective of this project is to monitor baby when dear ones are far away from baby and to swing cradle if baby is crying using DC motor
15	TEMBMA3366	Smart Security System For Suspicious Activity Detection In Volatile Areas (Domains / Arduino+Python)	The main objective of this project is to provide security by sending captured video to mail when any suspicious activity happened in volatile areas
16	TEMBMA3365	Machine Learning Based Smart Home For Differently Abled People (Domains / Arduino+Python)	The main objective of this project is to control home appliances without any physical challenge which will be helpful for differently abled people
17	TEMBMA3363	Seat Belt Alarm and Controlling of Vehicle (Domains / Arduino+Python)	The main objective of this project is to alert driver about Seat belt and controlling vehicle accordingly
18	TEMBMA3362	Automatic Intruder Detection and Alerting System Via Mail (Domains / Arduino+Python)	The main objective of this project is to detect the intruder and alert the owner by sending mail
19	TEMBMA3356	A Smart Access Control for Restricted Buildings Using Vehicle Number Plates Recognition System (Domains / Arduino+Python)	The main objective of this project is to allow the vehicles whose vehicle numbers are authorised only
20	TEMBMA3357	Driver Drowsiness Detection (Domains / Arduino+Python)	The main objective of this project is to detect whether driver is drowsy or not by interfacing camera with Python installed in PC
21	TEMBMA3358	Smart Door Unlocking System with Face Recognition (Domains / Arduino+Python)	The main objective of this project is to unlock the door if face is recognised, otherwise door will not be opened
22	TEMBMA3359	Monitoring the Movements of Wild Animals and Alert System Using Deep Learning Algorithm (Domains / Arduino+Python)	The main objective of this project is to monitor movements of objects using YOLO algorithm and gives alert when wild animal is detected
23	TEMBMA3360	Facial Recognition Smart Glasses for Visually Impaired People (Domains / Arduino+Python)	The main objective of this project is to give support for visually impaired people by adding face recognition in

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			the system
24	TEMBMA3361	Covid Disinfectant Tunnel Using Face mask Detection & Temperature Monitoring (Domains / Arduino+Python)	The main objective of this project is to detect face mask and monitor temperature for preventing from COVID infection
25	TEMBMA3355	Prevention of Mobile Usage while Boarding and De-boarding through Bus Alert System (Controllers / Arduino)	The main objective of this project is to prevent a mobile usage of a driver while he is in driving by detecting a person and mobile through Camera
26	TEMBMA3354	An Emergency Message and Call System for People with Epilepsy (Domains / Embedded applications)	The main objective of this project is to send an immediate call and message which is useful for Epilepsy people
27	TEMBMA3353	Real-time Alert System for Auxiliary Transformer Failures (Domains / Electrical)	The main objective of this project is to give alert for failure of Transformer by overloading issues
28	TEMBMA3352	Microcontroller Application in Feeding Fish Using an Android Mobile (Domains / WSN)	The main objective of this project is to feed fish by using commands form Mobile
29	TEMBMA3351	Internet of Things based Smart Flood forecasting and Early Warning System (Domains / Embedded applications)	The main objective of this project is to alert when rain detects, flood detects and warn if they cross threshold values
30	TEMBMA3350	Farm Animal Location Tracking System Using Arduino and GPS Module (Domains / Embedded applications)	The main objective of this project is to locate farm animals and track them using GPS module
31	TEMBMA3349	Design and Development of Robotic Vehicle for Isolation Ward (Domains / Robotics)	The main objective of this project is to develop a Robotic vehicle which can measure health parameters so that it will be useful for Isolation ward
32	TEMBMA3348	Sign Recognition and Voice Conversion Device for Dumb (Controllers / Raspberry pi)	The main objective of this project is to recognize signs of dumb people and convert into voice commands
33	TEMBMA3347	Sign Recognition and Voice Conversion Device for Dumb (Controllers / Arduino)	The main objective of this project is to recognize signs of dumb people and convert into voice commands
34	TEMBMA3346	Face Recognition Based Door Lock System using Arduino and Webcam (Domains / OpenCV)	The main objective of this project is to develop a cost effective system for higher security purpose that will only allow the authorized person by their facial features
35	TEMBMA3345	Improving the Performance Efficiency of Village Pond Cleaner Using Arduino in the	The main objective of this project is to clean waste on surfaces of water

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S.No	Project Code	Project Name	Objective
		Basis of Bluetooth Controlled Process (Domains / Robotics)	bodies like ponds, rivers etc.
36	TEMBMA3344	RC Surveillance Car Using Raspberry pi along with Smartphone Controller by Wi-Fi and Bluetooth Technologies (Domains / Robotics)	The main objective of this project is to make use of both Wi-Fi and Bluetooth technologies for live video streaming and controlling of robot respectively.
37	TEMBMA3343	Crowd Avoidance Door For Covid Safety	The main objective of this project is to allow the Employess or Staff through the RFID cards and public will wait at lobby If necessary employess use bluetooth or button to open the door and enter the public inside the room or hall
38	TEMBMA3342	Arduino based Automated Safety Ensuring System for Passenger Boats (Domains / Embedded applications)	The main objective of this project is to save the lives of individual persons and avoid accidents of boats.
39	TEMBMA3341	Human Emotion Detection Using Open CV (Domains / OpenCV)	The objective of this project is to recognize the human emotions based on their facial expressions
40	TEMBMA3340	Head-Motion Controlled Wheelchair (Domains / Robotics)	The objective of this project is used to control the wheel chair based on head movements
41	TEMBMA3339	Image Text to Speech Conversion in the Desired Language by Translating with Raspberry Pi (Domains / OpenCV)	The main objective of this project is to convert the language from english to other defined languages and providing output through speakers. So that people who can't understand english can make more use of it.
42	TEMBMA3338	Vehicle Speed Detection using Machine Learning Approach (Domains / OpenCV)	The main objective of this project is to identify the speed of vehicle through predefined machine learning files. If there is an overspeed, an SMS alert will be sent to authorities.
43	TEMBMA3337	Arduino based Medicine Reminder and Vending Machine (Controllers / Arduino)	The main objective of this project to remind the elder people to take medicine in time along with it, it also dispenses the right medicine for that time.
44	TEMBMA3246	Face Mask Detection Using Arduino & ESP32 CAM Module (Domains / Embedded applications)	The main objective of this project is to detect the face mask while entering into any public place like shopping malls, offices, schools, etc. The Highlight in this project is using ESP32 Cam, we are detecting



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S.No	Project Code	Project Name	Objective
			face masks.
45	TEMBMA3326	Attendance System Using Face Recognition Using Raspberry Pi (Domains / OpenCV)	The main objective of this project is to recognize face for Attendance monitoring using Raspberry Pi
46	TEMBMA3325	Detect People in a Frame Using Raspberry Pi with Open CV (Domains / OpenCV)	The main objective of this project is to detect people in a frame using OpenCV
47	TEMBMA3323	Unlocking Home Automation System by Face Detection Using ESP32 camera (Domains / Embedded applications)	The main objective of this project is to control home appliances by face detection through ESP32 camera
48	TEMBMA3316	Smart Building Energy Management System Using Machine Learning And IOT (Domains / Machine Learning)	The main objective of this project is to get the building data like Temperature, gas values, pressure values and motion detection
49	TEMBMA3254	WSN Based Mountain Climber Health & GPS Tracker (Domains / WSN)	The main objective of this project is to track the location and health condition of Mountain climber
50	TEMBMA3237	Advanced vehicle Monitoring System and Automatic Vehicle Dim and Brightness Controlled using NRF24L01 Module (Domains / WSN)	The main objective of this project is to monitor vehicle light brightness using Wireless Communication
51	TEMBMA3305	Biometric Based Exam Gate Authentication System with SMS Alert (Domains / Embedded applications)	The main objective of this project is to open and close gate using Biometric Authentication
52	TEMBMA3303	Ultrawide Band Radar System For Through Wall Human Vital Signs Detection (Domains / Embedded applications)	The main objective of this project is to detect human signs using Radar sensor
53	TEMBMA3302	Real Time Smart Attendance Monitoring System With Image Processing And Thermal Scanning (Domains / OpenCV)	The main objective of this project is to Monitor attendance with Image processing by face recognition and also Temperature scan
54	TEMBMA3304	Notice Board and LCD Display Using IOT (Domains / IOT)	The main objective of this project is to Display the Text on notice Board using IoT
55	TEMBMA3256	A Robust Security Framework for Cloud-Based Logistics Services (Domains / IOT)	The main objective of this project is to provide security in Logistic Department in intruder prospective
56	TEMBMA3258	Design and Implementation of IoT System for Aeroponic Chamber Temperature Monitoring (Domains / Embedded applications)	The main objective of this project is to monitor and control Temperature in the root chamber which is suitable for Plant Growth
57	TEMBMA3257	Portable Roadside Sensors for Vehicle Counting Classification & Speed Measurement (Domains / OpenCV)	The main objective of this project is to measure speed of vehicle by using Two Ultrasonic sensors and

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S.No	Project Code	Project Name	Objective
			sending the over speed vehicle image to cloud
58	TEMBMA3255	IOT Flood Monitoring & Alerting System (Domains / IOT)	The main objective of this project is to monitor Floods by getting sensors data on IoT platform
59	TEMBMA3253	Intrusion Detection System Using Regulated Patrolling Robots for Apartments (Domains / Robotics)	The main objective of this project is to develop a Robot which can patrol during Night times for Intruder Detection in Apartments
60	TEMBMA3251	Smart Parking Solutions for On-Street and Off-Street Parking (Domains / OpenCV)	The main objective of this project is to give better solution for problems facing while parking
61	TEMBMA3291	Smart Footwear and Shocking Band for Women Security (Domains / Embedded applications)	The main objective of this project is to provide women safety by sending their location with GSM message
62	TEMBMA3290	Fully Automated Smart Crop Field Protection System Against Numerous Behaviors of Wild Animals (Domains / Embedded applications)	The main objective of this project is to protect the Crop field from different sources of distraction due to Wild Animals
63	TEMBMA3289	Deep Learning Based Parametric Model for V2V Communication System (Domains / WSN)	The main objective of this project is to communicate between two vehicles for better Transportation model
64	TEMBMA3288	Cloud Assisted School Children Tracking System (Domains / WSN)	The main objective of this project is to build tracking system for School Children and monitoring their location in Server
65	TEMBMA3287	Scalable Edge Device Model for Early Wild Life Fire Detection System (Domains / Machine Learning)	The main objective of this project is to develop a model for fire Detection in forest for Wild life protection
66	TEMBMA3286	Vehicle Theft Intimation over SMS and Remote Control of its Engine (Domains / Embedded applications)	The main objective of this project is to notify owner about vehicle theft and also controlling of Engine from Remote place
67	TEMBMA3285	IoT based Energy Efficient Smart Street Lighting Technique with Air Quality Monitoring (Domains / IOT)	The main objective of this project is to Integrate both Air Quality and Street Lighting Systems for Energy conservation
68	TEMBMA3284	Smart Home for Helpless Old Aged People (Domains / WSN)	The main objective of this project is to Control home appliances easily so that it it will be helpful for Old Age people
69	TEMBMA3283	Designing IoT-Based Independent Pulse Oximetry Kit as an Early Detection Tool for Covid-19 Symptoms	The main objective of this project is to know COVID symptoms earlier for avoiding its spread

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S.No	Project Code	Project Name	Objective
		(Domains / Biomedical)	
70	TEMBMA3282	Automated Fluid Level Sensing and Controlling System Using IoT (Domains / IOT)	The main objective of this project is to measure the Fluid level in Borewells, tanks etc. to assist and alert everyone
71	TEMBMA3281	IoT Based Air Quality Monitoring System with Server Notification (Domains / IOT)	The main objective of this project is to monitor parameters of air for measuring Quality and uploading data to server
72	TEMBMA3280	Home Security System for the Hearing Impaired Using ML (Domains / Machine Learning)	The main objective of this project is to assist Hearing Impaired people by using Machine Learning for making Home secure with Face recognition
73	TEMBMA3279	Smart Home with Wireless Smart Doorbell with Smart Response (Domains / OpenCV)	The main objective of this project is to make every action in Home as Smart by building Smart Doorbell with Smart Response
74	TEMBMA3278	Automated Street Light Control And Manhole Monitoring With Fault Detection & Reporting System For Municipal Department (Domains / Embedded applications)	The main objective of this project is to integrate Street Light controlling and Manhole monitoring for better Transportation
75	TEMBMA3277	LED Advertising Board Based on IOT E-Circular Notification for Students Through WIFI (Domains / Embedded applications)	The main objective of this project is to develop an Advertising board for displaying notifications in different places
76	TEMBMA3276	Secure Home Entry Using Raspberry Pi with Notification via Telegram (Domains / IOT)	The main objective of this project is to allow Authorized persons into home and capture Image of Unauthorized person, sending through Telegram
77	TEMBMA3275	Security Experiences in IoT based Applications for Building and Factory Automation (Domains / IOT)	The main objective of this project is to build Security system by controlling appliances in Buildings and Factories using Server
78	TEMBMA3274	Smart Borewell Child Rescue System Through Wireless Monitoring Using Artificial Intelligence (Domains / Artificial Intelligence)	The main objective of this project is to Rescue Child from Borewell by measuring distance of child from ground level
79	TEMBMA3273	Intelligent Access Control System for Granary Based on Face Recognition and Oxygen Concentration (Domains / Machine Learning)	The main objective of this project is to give access to Authorized persons to enter into Granary and also to monitor inside parameters
80	TEMBMA3271	Fully Automated Progressive Productive Monitoring and Hazardous Detection System for Smart Poultry Farming	The main objective of this project is to monitor Temperature, Light Intensity, Gas levels in Poultry for



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S.No	Project Code	Project Name	Objective
		(Domains / Embedded applications)	fully Automated system
81	TEMBMA3270	Virtual Fencing using Yolo Framework in Agriculture Field (Domains / Machine Learning)	The main objective of this project is to Monitor Agriculture field through Technological Advancement like YOLO framework
82	TEMBMA3269	A Smart Access Control for Restricted Buildings Using Vehicle Number Plates Recognition System (Domains / Machine Learning)	The main objective of this project is to allow only Authorized Vehicles into the Buildings or Apartments by keeping Database of Vehicle plate numbers
83	TEMBMA3268	E-Agriculture: Irrigation System based on Weather Forecasting (Domains / IOT)	The main objective of this project is to build an Irrigation system which can be able to monitor Weather conditions and Turning ON/OFF motor Automatically
84	TEMBMA3267	Timeline Driven Dynamic Vehicle Speed Control System for Next Generation ITS System (Domains / Embedded applications)	The main objective of this project is to Control the Vehicle speed in prescribed Time period by using Zigbee Technology
85	TEMBMA3266	Stored Grain Pests Monitoring System Based on Raspberry Pi (Domains / Embedded applications)	The main objective of this project is to Monitor Pests in Stored Grain by capturing image of Pests and also for monitoring Temperature, Light Intensity and Gas values in Stored grain
86	TEMBMA3265	Smart Buggy: An IoT Based Smart Surveillance Robotic Car Using Raspberry Pi (Domains / Robotics)	The main objective of this project is to develop a Robot with Camera attached to it for Surveillance
87	TEMBMA3264	Block-Matching Methods to Help Navigating Visually Impaired People using Raspberry PI Platform (Domains / Embedded applications)	The main objective of this project is to Help Visually Impaired People by navigating their Location using Raspberry Pi processor through GPS
88	TEMBMA3263	Design of a Vaccine Storage and Transportation System in Remote Areas Based on Raspberry Pi (Domains / Biomedical)	The main objective of this project is to monitor Temperature, Gas levels in Vaccine Storage System for transporting them to Remote places
89	TEMBMA3262	Cluster-Analysis-Based User-Adaptive Fall Detection Using Fusion of Heart Rate Sensor and Accelerometer in a Wearable Device (Domains / Biomedical)	The main objective of this project is to detect fall of Patient using MEMS sensor and monitor Heart Beat in Server
90	TEMBMA3261	Design of Smart Home Implementation Within IoT Natural Language Interface (Domains / Android)	The main objective of this project is to Control Home Appliances using Bluetooth with different Languages
91	TEMBMA3260	Design of Raspberry Pi Web-based Energy Monitoring System for Residential Electricity	The main objective of this project is to monitor Energy consumption in

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		Consumption (Domains / Electrical)	Home appliances from Remote places and also to Control them Remotely using Webserver
92	TEMBMA3259	Implementation of Smart Aquarium System Supporting Remote Monitoring and Controlling of Functions using Internet of Things (Domains / IOT)	The main objective of this project is to Monitor and Control Aquarium from Remote Locations for better productivity
93	TEMBMA3247	Women Safety Night Surveillance Robot using Raspberry pi (Domains / Robotics)	The main objective of this project is to provide security for women during night times by giving a buzzer alert if any odd sound is detected by the sound sensor and to send Mail alert with Live location of the women captured by a Camera
94	TEMBMA3245	Solar Based Wheel Chair For Disabled Peoples (Domains / Robotics)	The main objective of this project is to assist disabled people by controlling their wheelchairs through hand gestures. MEMS sensor is such a sensor which able to detect the position & it is attached to the hand
95	TEMBMA3244	ML based Surveillance System for Detection bike ride without Helmet & Triple ride (Domains / Machine Learning)	The main objective of this project is to detect bike riders without Helmet and Triple riders using Machine Learning Techniques
96	TEMBMA3240	Automated Robot for Seeding and Transplantation of Rice and Wheat Crops (Domains / Robotics)	The main objective of this project is to develop a Robot which can be used for Seeding and transplantation through possible arrangements
97	TEMBMA3239	IoT and Deep Learning Based Approach for Rapid Screening and Face Mask Detection for Infection Spread Control (Domains / Deep Learning)	The main objective of this project is to Detect Face mask by Deep Learning and temperature scanning by IoT
98	TEMBMA3236	Fall Detection of Riders using Inertial Sensors: A Smart Helmet (Domains / Embedded applications)	The main objective of this project is to provide Smart Helmet which detects Falling of Riders and make them Alert
99	TEMBMA3217	Smart Cane for Visually Impaired Person (Domains / Embedded applications)	The main objective of this project is to build a smart cane for Visually Impaired people to travel outside their homes Independently
100	TEMBMA3216	Vision-based Parking Occupation Detecting with Embedded AI Processor (Domains / Artificial Intelligence)	The main objective of this project is to detect Parking Slot, whether available or occupied by using Computer Vision

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S.No	Project Code	Project Name	Objective
101	TEMBMA3233	AI Based Rush Collision Prevention in Railways (Domains / Artificial Intelligence)	The main objective of this project is to prevent Collision in Railways by using RFID Reader
102	TEMBMA3241	Design and Development of Three-Stage Industrial Car Washing System (Domains / Mechatronics)	The main objective of this project is to Develop Three stage Washing System like Spraying, Cleaning and Drying on a Single Setup
103	TEMBMA3231	Pothole Detection and Levelling Robot (Domains / Robotics)	The main objective of this project is to detect Pothole and Levelling them by using Servo Motor Arrangement
104	TEMBMA3230	Social Distance Shopping Using Embedded Based Auto Cart and Android App (Domains / Android)	The main objective of this project is to maintain Social Distance while Shopping and Controlling Cart through Mobile App
105	TEMBMA3229	IOT Based Pregnancy Women Health Monitoring System for Prenatal Care (Domains / IOT)	The main objective of this project is to monitor health parameters of Pregnancy women continuously for treating her with more care
106	TEMBMA3228	Medication Alerts and Supervisory of Health Using IOT (Domains / IOT)	The main objective of this project is to alert concerns so that we can supervise more effectively
107	TEMBMA3227	IOT based Automated Horticulture System for Farmers (Domains / IOT)	The main objective of this project is to give flexibility to Horticulture Farmers by monitoring through server
108	TEMBMA3226	Authenticated Access Control for Vehicle Ignition System by Driver's License and Fingerprint Technology (Domains / Embedded applications)	The main objective of this project is to provide Authentication access to start the vehicle by using Driver's License and Fingerprint also
109	TEMBMA3224	Smart Warehouse Monitoring System using IOT (Domains / IOT)	The main objective of this project is to monitor Warehouse by measuring parameters like light, Temperature etc. and uploading data to server.
110	TEMBMA3223	IOT Based Dumpster Monitoring System (Domains / IOT)	The main objective of this project is to develop a smart system which helps to keep our villages and cities clean using IoT
111	TEMBMA3222	Automated Cultivation System for Plants & Mushrooms using Raspberry Pi (Domains / Embedded applications)	The main objective of this project is to build automatic Cultivation system for Plants & Mushrooms using Raspberry Pi
112	TEMBMA3221	Advanced Security System in Military for Identification of Trespassers using Ultrasonic Radar (Domains / WSN)	The main objective of this project is to provide Security system for Trespassers identification in Military

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113	TEMBMA3220	An IoT-based Virtual Doctor using Raspberry Pi with Webserver (Domains / IOT)	The main objective of this project is to provide Online health checkup by looking into Health Parameters in the server
114	TEMBMA3219	Online System for Monitoring Water Quality, Leaks, Contamination and Managing Pipeline Network (Domains / IOT)	The main objective of this project is to monitor Water Quality, Leaks and to manage through server
115	TEMBMA3218	MedRobo - Medicine Delivering and Patient Parameter Monitoring Robot (Domains / Robotics)	The main objective of this project is to reduce the human-human contact and to measure Vital health parameters using Robot
116	TEMBMA3243	Automatic Contactless Switch for Smart Home (Domains / Embedded applications)	The main objective of this project is to build smart Home in this pandemic situation by controlling without contact to any device
117	TEMBMA3212	Smart Fish Aquaculture Monitoring System with Water Color Identification Using Mobile Camera (Domains / OpenCV)	The main objective of this project is to identify the color of water when pH is acidic in nature by capturing image using mobile camera
118	TEMBMA3005	Finger Print Based Door Open System (Controllers / Arduino)	The main objective of this project is to open and close the door by using Fingerprint authentication
119	TEMBMA3000	IoT Based Greenhouse Monitoring And Controlling System (Domains / IOT)	The main objective of this project is to monitor Greenhouse parameters like Temperature, light etc, and to upload data to server
120	TEMBMA2996	Dual Axis Solar Tracking System with Weather Monitoring (Domains / Renewable)	The main objective of this project is to track solar panel according to sunlight by using LDRs and shifts the solar panel direction according to sunlight and here also we will monitor the weather condition surrounding to it by using DHT11 and rain sensor.
121	TEMBMA3030	Dual Axis Solar Tracking System with Weather Monitoring (Controllers / Arduino)	The main objective of this project is to track solar panel according to sunlight by using LDRs and shifts the solar panel direction according to sunlight and here also we will monitor the weather condition surrounding to it by using DHT11 and rain sensor.
122	TEMBMA2775	Smart Soldier Strap (Controllers / Arduino)	The main objective of this project is to monitor the health conditions of a soldier. Heartbeat and body temperature of every soldier will be

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			monitored. This technology can be helpful to provide the accurate location of missing soldier in critical condition and overcome the drawback of soldiers missing in action.
123	TEMBMA2538	Smart Soldier Strap (Domains / WSN)	The main objective of this project is to monitor the health conditions of a soldier. Heartbeat and body temperature of every soldier will be monitored. This technology can be helpful to provide the accurate location of missing soldier in critical condition and overcome the drawback of soldiers missing in action.
124	TEMBMA3215	Trash Collector Robot (Domains / Robotics)	The main objective of this project is to design a robot which collects trash in different localities like industries, houses etc
125	TEMBMA3210	IOT based Color Sorting Machine (Controllers / Raspberry pi)	The main objective of this project is to sorting the objects based on their colors using Raspberry Pi
126	TEMBMA3070	Social Distance and Monitoring Robot Queue (Domains / Robotics)	The main objective of this project is to limit the spread of covid by observing distance between disease spreading individuals
127	TEMBMA3200	Solar & Wind Power Electrical Vehicles (Domains / Electrical)	The main objective of this project is to generate power using solar and wind energy to run electric vehicles
128	TEMBMA3196	Bio-Feedback Hand Glove (Domains / Embedded applications)	The main objective of this project is to monitor health parameters by attaching sensors on hand glove
129	TEMBMA3208	IOT based Automated Hydroponic Vertical Hydroponics Farming (Domains / IOT)	The main objective of this project is to build a system with Vertical Hydroponics farming which is necessary to fulfill future needs
130	TEMBMA3205	Smart Disinfection and Sanitation Tunnel (Domains / Embedded applications)	The main objective of this project is to scan the temperature of person by detecting through Camera and thus disinfecting virus
131	TEMBMA3203	Collide Information Capturing for Vehicles and Alerting System Using Raspberry Pi via Email (Controllers / Raspberry pi)	The main objective of this project is to give alert on Collision of vehicles using Raspberry Pi processor
132	TEMBMA3201	Wireless Battery Charging for Electric Vehicles (Domains / Electrical)	The main objective of this project is to transfer electrical energy from



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S.No	Project Code	Project Name	Objective
			source to load for a small distance without any conducting wires
133	TEMBMA3068	Multi Language Controlled Home Automation using Arduino (Domains / Android)	The main objective of this project is to help handicapped and old aged people who will enable them to control home appliances and alert them in critical situations
134	TEMBMA3067	Tripping Mechanism of Over Voltage and Under Voltage System (Domains / Electrical)	The main objective of this project is to build a system that monitors voltage and provides a breakpoint based low and high voltage tripping mechanism that avoids any damage to the load.
135	TEMBMA3147	Navigation System for Visually Impaired People by Raspberry Pi (Domains / Embedded applications)	The main objective of this project is to help to understand the smart navigation system for blind people using raspberry pi in a better way. This smart navigation system is a smart stick that helps the visually impaired or blind people to make there lives simple.
136	TEMBMA3183	Smart Speaking Glove (Domains / Embedded applications)	The main objective of this project is to help physically disabled people to communicate with normal people by using Smart glove
137	TEMBMA3145	Arduino Meconium Wheels Robot (Domains / Robotics)	The main objective of this project is to control the robot through commands received via Bluetooth App.
138	TEMBMA3170	IOT Instant Contactless COVID Testing Booth Automation (Domains / IOT)	The main objective of this project is to develop a system with Contactless COVID testing booth for instant registration and testing process
139	TEMBMA3161	Examination Room Guide Using RFID (Domains / WSN)	The main objective of this project is to guide the student at the examination centers for searching the examination room by using RFID card as hall ticket.
140	TEMBMA3132	Smart Pillow for Advance Health sensing (Domains / Biomedical)	The main objective of this project is to provide efficient health monitoring with the help of smart pillow by using various health monitoring sensors.
141	TEMBMA3129	Heart Attack Detection by Heartbeat Sensing using IOT (Domains / Biomedical)	The main objective of this project is to develop a reliable patient monitoring system so that the

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			healthcare professionals can monitor the patients, who are either hospitalized or executing their normal daily life activities
142	TEMBMA3126	A Smart Optimization of Fault Diagnosis in Electrical Grid Using Distributed Software-Defined IOT System (Domains / Electrical)	The main objective of this project is to analyze and monitor the electrical grid parameters like temperature, current of the loads, voltage and oil level of the transformer.
143	TEMBMA3118	Vehicle and License Authentication using Face Recognition (Domains / OpenCV)	The main objective of this project is to simplify the driving license authentication system by making it a digitalized version.
144	TEMBMA3099	Raspberry Pi Assisted Face Recognition System (Domains / OpenCV)	The main objective of this project is to design a system which recognize face by using the dataset, created earlier
145	TEMBMA3090	Low Cost Robotic Agent Design for Disabled and Covid-19 Affected people (Domains / Biomedical)	The main objective of this project is to design robotic agent which will be able to help disabled and virus affected people with hand gestures
146	TEMBMA3141	Automation of Floor Cleaning Robot (Domains / Robotics)	The main objective of this project is to design a floor cleaning Robotic system that can work in manual or in an automatic mode
147	TEMBMA3123	Driver Drowsiness Detection (Domains / OpenCV)	The main objective of this project is to detect the Drowsiness of a driver by numerical calculations like distance between lips and eyes in Python using Camera
148	TEMBMA3142	Smart Glasses for Blind (Domains / OpenCV)	The main objective of this project is to help blind people to identify the object in front of them without depending on anyone. This system gives an audio feedback to the person.
149	TEMBMA3121	Baby Monitoring System using Raspberry Pi (Domains / Biomedical)	The main objective of this project is to help the Parents to monitor their child even if they are far away from home & can detect every activity of the Baby from any distant corner of the world.
150	TEMBMA3105	MIDI Controller using Arduino (Domains / Embedded applications)	The main objective of this project is to work with digital music production by designing our own DAW(Digital Audio Workstation)

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
151	TEMBMA3140	Fully Automated Attendance Machine Using Raspberry Pi (Controllers / Raspberry pi)	The main objective of this project is to deal with face detection for an attendance recorder system for the purpose of maintaining attendance details of the students
152	TEMBMA3100	Smart Electronic Voting Machine with Face Recognition using Raspberry Pi (Domains / OpenCV)	The main objective of this project is to eliminate the fraudulent votes that are happening during the election procedure and to provide a highly secured data transfer to IOT which produces results who is in the lead for every minute after voting with the help of this smart EVM system.
153	TEMBMA3095	IOT Based Air Pollution Monitoring for Smart Cities with Raspberry Pi (Domains / IOT)	The main objective of this project is to monitor air quality parameters from anywhere through an IOT platform
154	TEMBMA3093	IOT Based Smart Museum using Bluetooth Low Energy (Domains / WSN)	The main objective of this project is to share knowledge about historical arts to visitors by using BLE technology
155	TEMBMA3091	Object Recognition & Location Tracking (Domains / OpenCV)	The main objective of this project is to avoid accidents by identifying person or any animal on roads and to track the vehicle whenever we want
156	TEMBMA3089	Design and Development of AgriBot for Automatic Seed Sowing Machine (Domains / Robotics)	The main objective of this project is to design an Agri-bot which is used for automatic seeding, for which a Servo Motor is used in the project
157	TEMBMA3086	Patient Monitoring System for Home Quarantine People (Domains / Biomedical)	The main objective of this project is to continuously check the health status of Home quarantine people by monitoring their health parameters
158	TEMBMA3084	Dry Hand Washing Machine by Fog Disinfection to Save Water (Domains / Embedded applications)	The main objective of this project is to develop a machine for dry hand washing by Fog disinfection to save water
159	TEMBMA3078	IOT & RFID Based Wireless Vehicle Charging using Arduino (Domains / WSN)	The main objective of this project is to charge the vehicle wirelessly via inductive coupling using wireless charging system
160	TEMBMA3074	RFID and Face Recognition based Smart Attendance System (Domains / Embedded applications)	The main objective of this project is to maintain attendance details of the students using RFID and face recognition

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
161	TEMBMA3048	IOT Color Based Product Sorting Machine (Domains / Mechatronics)	The suggested framework will be a demo rendition which gives expense effective, taking less time and technically the easiest way for differentiating objects. This framework utilizes Arduino Uno which makes this model simple to utilize which is more additional effective. The main failure will be caused if the sensing of object according to color is not done. Therefore, it is very important to have proper and checked sensors. Further, making desirable changes it can be used in small scale and large scale industries as well.
162	TEMBMA3058	Autonomous Farming Robot with Plant Health Indication (Domains / Mechatronics)	The main objective of this project is to develop Agri-Bot for automatic farming and plant health indication to reduce the man power and for controlling, uploading data by using a mobile app.
163	TEMBMA3060	Web Based Embedded Robot For Safety And Security Applications Using Zigbee (Domains / Mechatronics)	The main objective of this project is to design a safety and security robot using Zigbee and the application code will be developed using Arduino .
164	TEMBMA3061	Wireless Surveillance Robot with Motion Detection and Live Video Transmission (Domains / Mechatronics)	The main objective of this project is designing a remote surveillance robot using application code, which is developed on Rasberry Pi.
165	TEMBMA2994	Driver Safety Analysis with Accident Detection using WSN (Domains / WSN)	The main objective of this project is to analyse the driver state and gives alert on accident detection with GPS location
166	TEMBMA2982	Child in Safety with Localization Awareness (Domains / WSN)	The main objective of this project is to give safety to child by sending their location for continuous monitoring
167	TEMBMA2983	Embedded Based Vehicle Speed Control System Using Wireless Technology (Domains / WSN)	The main objective of this project is to alert driver to control the speed of vehicle in critical zones like schools, hospitals etc.
168	TEMBMA2738	Technological advances in LPG sector (Controllers / Raspberry pi)	The main objective of the project is to identify gas leakage, gas level limit in a cylinder and also based on its cylinder weight, the system alerts the owner to book a cylinder through an app

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
169	TEMBMA2738	Technological advances in LPG sector (Controllers / Raspberry pi)	The main objective of the project is to identify gas leakage, gas level limit in a cylinder and also based on its cylinder weight, the system alerts the owner to book a cylinder through an app
170	TEMBMA2715	Technological advances in LPG sector (Domains / Industrial Automation)	The main objective of the project is to identify gas leakage, gas level limit in a cylinder and also based on its cylinder weight, the system alerts the owner to book a cylinder through an app
171	TEMBMA2715	Technological advances in LPG sector (Domains / Industrial Automation)	The main objective of the project is to identify gas leakage, gas level limit in a cylinder and also based on its cylinder weight, the system alerts the owner to book a cylinder through an app
172	TEMBMA2740	Fire Detection and Prevention System Using Machine Learning (Controllers / Arduino)	The main objective of this system is to identify the fire accidents using machine learning and gives an alert SMS to fire station along with buzzer alert and also tries to prevent the fire by sprinkling water using dc pump.
173	TEMBMA2741	Fire Detection and Prevention System Using Machine Learning (Controllers / Raspberry pi)	The main objective of this system is to identify the fire accidents using machine learning and gives an alert SMS to fire station along with buzzer alert and also tries to prevent the fire by sprinkling water using dc pump.
174	TEMBMA2574	Fire Detection and Prevention System Using Machine Learning (Domains / Machine Learning)	The main objective of this system is to identify the fire accidents using machine learning and gives an alert SMS to fire station along with buzzer alert and also tries to prevent the fire by sprinkling water using dc pump.
175	TEMBMA2754	Density-based traffic light control using OpenCV (Controllers / Raspberry pi)	The objective of this project is to monitor and control the traffic signals on road based on density.
176	TEMBMA2543	Density-based traffic light control using OpenCV (Domains / Embedded applications)	The objective of this project is to monitor and control the traffic signals on road based on density.
177	TEMBMA2756	Child Safety Monitoring System Based on IoT (Controllers / PIC16F77A)	The objective of this project is to provide safety and tracking facility to parents and to locate and monitor



### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			the child
178	TEMBMA2544	Child Safety Monitoring System Based on IoT (Domains / WSN)	The objective of this project is to provide safety and tracking facility to parents and to locate and monitor the child
179	TEMBMA2760	Ultrasonic Spectacles and Waist-belt for Visually Impaired and Blind Persons (Controllers / PIC16F77A)	The main objective of the project is mainly intended to design a voice based alerting system for the blind people based on ultrasonic distance for obstacle detection and voice circuit for voice based announcements. The advantage of this device is voice based announcement for easy navigation
180	TEMBMA2762	Ultrasonic Spectacles and Waist-belt for Visually Impaired and Blind Persons (Controllers / Raspberry pi)	The main objective of the project is mainly intended to design a voice based alerting system for the blind people based on ultrasonic distance for obstacle detection and voice circuit for voice based announcements. The advantage of this device is voice based announcement for easy navigation
181	TEMBMA2546	Ultrasonic Spectacles and Waist-belt for Visually Impaired and Blind Persons (Domains / WSN)	The main objective of the project is mainly intended to design a voice based alerting system for the blind people based on ultrasonic distance for obstacle detection and voice circuit for voice based announcements. The advantage of this device is voice based announcement for easy navigation
182	TEMBMA2767	Junction Street Light System Automatic Control Using Renewable Energy Resource (Controllers / NodeMCU)	The main objective is switching of street lights in the evening when there is dark using solar energy stored but focuses on switching only when any object/vehicle/public passes by , by using sensors and then is automatically switched on when they are passing.
183	TEMBMA2768	Junction Street Light System Automatic Control Using Renewable Energy Resource (Controllers / Arduino)	The main objective is switching of street lights in the evening when there is dark using solar energy stored but focuses on switching only when any object/vehicle/public passes by , by using sensors and then is automatically switched on when they are passing.
184	TEMBMA2712	Junction Street Light System Automatic Control	The main objective is switching of

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		Using Renewable Energy Resource (Domains / Renewable)	street lights in the evening when there is dark using solar energy stored but focuses on switching only when any object/vehicle/public passes by , by using sensors and then is automatically switched on when they are passing.
185	TEMBMA2771	Intelligent Monitoring System for NICU (Neonatal Intensive Care Unit) (Controllers / Raspberry pi)	The main objective of this project is to take care of a neonatal by monitoring baby's health parameters. This incubator system will provide a facility to monitor the baby's health from anywhere through an IoT platform. Moreover, the doctors, guardians and nurses get an immediate alert in emergency cases.
186	TEMBMA2717	Intelligent Monitoring System for NICU (Neonatal Intensive Care Unit) (Domains / Biomedical)	The main objective of this project is to take care of a neonatal by monitoring baby's health parameters. This incubator system will provide a facility to monitor the baby's health from anywhere through an IoT platform. Moreover, the doctors, guardians and nurses get an immediate alert in emergency cases.
187	TEMBMA2772	Robotic Arm for inspection, cleaning and painting of tanks on ships to save on time, cost and avoid accidents (Controllers / Arduino)	The main objective of the project is to minimize the labor for cleaning, inspection and painting of tanks on ships in time using Robotic arm and also to alert officials during leakage, to avoid accidents
188	TEMBMA2773	Solar Dryer Alarm for the safety of food (Controllers / Arduino)	The main objective of the project is to design a system for automatic temperature conditioning, for drying of fruits and vegetables based on the product and alerting after completion of the process
189	TEMBMA2774	The Smart Mailbox with Motion Controlled Security Camera (Controllers / Raspberry pi)	The main objective of this project is to design a smart mailbox that can gives an alert when a person places a courier in the mailbox. This system will identify the presence of a person and then activates the camera automatically which will capture the image and sends it to the owner via an email.
190 (Page 19)	TEMBMA2779	Development & Implementation of Smart Vehicle Over Speeding Detector using IoT	The main objective of the project is to monitor vehicle speed using IoT

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Controllers / Raspberry pi)	vehicle exceeds speed limit, then the vehicle's image will be captured and forward to concern officials by using IoT technology
191	TEMBMA2541	Development & Implementation of Smart Vehicle Over Speeding Detector using IoT (Domains / Image Processing)	The main objective of the project is to monitor vehicle speed and if vehicle exceeds speed limit, then the vehicle's image will be captured and forward to concern officials by using IoT technology
192	TEMBMA2780	Design and implementation of a vehicle to vehicle communication system using Li-Fi technology (Controllers / Arduino)	The main objective of the project is to implement Vehicle to vehicle communication in order to reduce vehicle's accidents by Li-Fi technology. The proposed use of Li-Fi technology comprises mainly light-emitting diode (LED) bulbs as means of connectivity by sending data through light spectrum as an optical wireless medium for signal propagation.
193	TEMBMA2554	Design and implementation of a vehicle to vehicle communication system using Li-Fi technology (Domains / WSN)	The main objective of the project is to implement Vehicle to vehicle communication in order to reduce vehicle's accidents by Li-Fi technology. The proposed use of Li-Fi technology comprises mainly light-emitting diode (LED) bulbs as means of connectivity by sending data through light spectrum as an optical wireless medium for signal propagation.
194	TEMBMA2555	Design and implementation of a vehicle to vehicle communication system using Li-Fi technology (Domains / Embedded applications)	The main objective of the project is to implement Vehicle to vehicle communication in order to reduce vehicle's accidents by Li-Fi technology. The proposed use of Li-Fi technology comprises mainly light-emitting diode (LED) bulbs as means of connectivity by sending data through light spectrum as an optical wireless medium for signal propagation.
195	TEMBMA2781	High protection bank locker security system using live image and voice authentication (Controllers / Raspberry pi)	The main objective of this project is to provide security to bank lockers by capturing live images and identifying voice notes.

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
196	TEMBMA2557	High protection bank locker security system using live image and voice authentication (Domains / Image Processing)	The main objective of this project is to provide security to bank lockers by capturing live images and identifying voice notes.
197	TEMBMA2782	IoT Based Smart Multi Application Surveillance Robot (Controllers / Arduino)	The main objective of the project is to design and develop a surveillance robot that can reduce the casualties in the war field, where it acts as surveillance robot to capture the intruders surrounding information before the intruder is attacked by the soldiers
198	TEMBMA2783	IoT Based Smart Multi Application Surveillance Robot (Controllers / PIC16F77A)	The main objective of the project is to design and develop a surveillance robot that can reduce the casualties in the war field, where it acts as surveillance robot to capture the intruders surrounding information before the intruder is attacked by the soldiers
199	TEMBMA2785	IoT Based Smart Multi Application Surveillance Robot (Controllers / Raspberry pi)	The main objective of the project is to design and develop a surveillance robot that can reduce the casualties in the war field, where it acts as surveillance robot to capture the intruders surrounding information before the intruder is attacked by the soldiers
200	TEMBMA2788	Air Pollution Monitoring System Using Waspote Gases Sensor Board in Wireless Sensor Network (Controllers / PIC16F77A)	The main objective of this project is to monitor and analyze the level of air pollution at certain location and inform the results to the user in graphical form through IOT.
201	TEMBMA2564	Air Pollution Monitoring System Using Waspote Gases Sensor Board in Wireless Sensor Network (Domains / WSN)	The main objective of this project is to monitor and analyze the level of air pollution at certain location and inform the results to the user in graphical form through IOT.
202	TEMBMA2794	Low-Cost Contact Thermometry for Screening and Monitoring During the COVID-19 Pandemic (Controllers / NodeMCU)	The main objective of the project is to use a low-cost, contact thermometer solution that is based on a silicon band gap temperature sensor to allow personal screening that is described using a Proof-of-Concept solution for pregnant women and women infants for self-monitoring
(Page 21)	TEMBMA2575	Low-Cost Contact Thermometry for Screening and Monitoring During the COVID-19	The main objective of the project is to use a low-cost, contact

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		Pandemic (Domains / Embedded applications)	thermometer solution that is based on a silicon band gap temperature sensor to allow personal screening that is described using a Proof-of-Concept solution for pregnant women and women infants for self-monitoring
204	TEMBMA2797	Automated Smart Sericulture For Enhancement Of Silk Production Using Embedded System (Controllers / NodeMCU)	The main objective of this project is to minimize manual invention of the farmer, by automating the process of silkworm rearing unit. This system can monitor and control temperature and humidity of silkworm rearing unit and in turn is used to increase the production of silk.
205	TEMBMA2798	Automated Smart Sericulture For Enhancement Of Silk Production Using Embedded System (Controllers / Arduino)	The main objective of this project is to minimize manual invention of the farmer, by automating the process of silkworm rearing unit. This system can monitor and control temperature and humidity of silkworm rearing unit and in turn is used to increase the production of silk.
206	TEMBMA2799	Automated Smart Sericulture For Enhancement Of Silk Production Using Embedded System (Controllers / Raspberry pi)	The main objective of this project is to minimize manual invention of the farmer, by automating the process of silkworm rearing unit. This system can monitor and control temperature and humidity of silkworm rearing unit and in turn is used to increase the production of silk.
207	TEMBMA2800	COVID-19 Fencing System & Contact Traceability (Controllers / Arduino)	The main objective of this project is to trace the location of the people, who entered into the COVID-19 contaminated area and sends the same to higher officials
208	TEMBMA2800	COVID-19 Fencing System & Contact Traceability (Controllers / Arduino)	The main objective of this project is to trace the location of the people, who entered into the COVID-19 contaminated area and sends the same to higher officials
209	TEMBMA2802	Monitoring & Controlling of Substation Using IoT in Distribution Power Grid (Controllers / Arduino)	The main objective of this project is to monitor the voltage, current, frequency and the temperature readings from the substation through IoT
210	TEMBMA2581	Monitoring & Controlling of Substation Using IoT in Distribution Power Grid (Domains / Electrical)	The main objective of this project is to monitor the voltage, current, frequency and the temperature



### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			readings from the substation through IoT
211	TEMBMA2803	Embedded based real time monitoring and detection of bacterial contamination in drinking water (Controllers / Arduino)	The main objective of the project is to determine whether the water has been contaminated or if any bacteria is in it, with the help of pH and the data will be sent through cloud.
212	TEMBMA2804	Design for visually impaired to work at Industry using RFID technology (Controllers / NodeMCU)	The main objective of the project is to provide navigation through a voice system to direct visually impaired to his table in the office/industry rather than depending on others with the help of RFID technology.
213	TEMBMA2810	Transmission of Data, Audio Signal and Text Using Li-Fi (Controllers / Arduino)	The main objective of the project is to send an audio signal from mobile to the speaker with the help of wireless LiFi technology
214	TEMBMA2587	Transmission of Data, Audio Signal and Text Using Li-Fi (Domains / WSN)	The main objective of the project is to send an audio signal from mobile to the speaker with the help of wireless LiFi technology
215	TEMBMA2811	IOT: A Novel Strategy for Biometric Voting system (Controllers / Arduino)	The main objective of the project is to propose a novel strategy, in which the validation of voting is done based on fingerprint of voter and GPS location where he utilized vote will send to a server
216	TEMBMA2813	IOT: A Novel Strategy for Biometric Voting system (Controllers / Raspberry pi)	The main objective of the project is to propose a novel strategy, in which the validation of voting is done based on fingerprint of voter and GPS location where he utilized vote will send to a server
217	TEMBMA2814	Smart Electronic Voting Machine Using Raspberry Pi with Face Recognition (Controllers / Raspberry pi)	The main objective of the project is to use a smart electronic voting system that eliminates fault voting in which validation can be done in two stages i.e., aadhar, finger print and/or facial recognition
218	TEMBMA2589	Smart Electronic Voting Machine Using Raspberry Pi with Face Recognition (Domains / OpenCV)	The main objective of the project is to use a smart electronic voting system that eliminates fault voting in which validation can be done in two stages i.e., aadhar, finger print and/or facial recognition
219 (Page 23)	TEMBMA2590	Smart Electronic Voting Machine Using	The main objective of the project is <a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a>

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		Raspberry Pi with Face Recognition (Domains / IOT)	to use a smart electronic voting system that eliminates fault voting in which validation can be done in two stages i.e., aadhar, finger print and/or facial recognition
220	TEMBMA2818	Pibot: The Raspberry Pi Controlled Multi-Environmental Robot For Surveillance & Live Streaming (Controllers / Raspberry pi)	The main objective of the project is to build a robot that is able to capture live stream, moves to different rooms and identifies the environmental conditions and finally sending the same data to cloud.
221	TEMBMA2824	Machine Learning-based Surveillance System for Detection of Bike Riders without Helmets and Triple Rides (Controllers / Arduino)	A machine learning based surveillance system which can able to detect the persons without helmet and/or people who are going on a triple rides
222	TEMBMA2733	Machine Learning-based Surveillance System for Detection of Bike Riders without Helmets and Triple Rides (Domains / Embedded with Matlab)	A machine learning based surveillance system which can able to detect the persons without helmet and/or people who are going on a triple rides
223	TEMBMA2825	IOT Based Smart Helmets for Construction Workers (Controllers / Arduino)	The main objective is to design a smart flexible helmets for construction workers to monitor their health condition and to identify their rotation or orientation with respect to gravity with the help of gyroscope sensor and sends the data to cloud
224	TEMBMA2752	Solar Powered Automated Multi-Tasking Agricultural Robot (Controllers / PIC16F77A)	The main objective of this project is to minimize the labor and to increase the speed and accuracy of the work through multi-tasking ability of Agriculture robot which are identification of field temperature, fire incidents occurred in the field, and intruder detection
225	TEMBMA2826	Solar Powered Automated Multi-Tasking Agricultural Robot (Controllers / Arduino)	The main objective of this project is to minimize the labor and to increase the speed and accuracy of the work through multi-tasking ability of Agriculture robot which are identification of field temperature, fire incidents occurred in the field, and intruder detection
226	TEMBMA2732	Solar Powered Automated Multi-Tasking Agricultural Robot (Domains / Renewable)	The main objective of this project is to minimize the labor and to increase the speed and accuracy of the work through multi-tasking ability of Agriculture robot which are

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			identification of field temperature, fire incidents occurred in the field, and intruder detection
227	TEMBMA2600	Solar Powered Automated Multi-Tasking Agricultural Robot (Domains / Robotics)	The main objective of this project is to minimize the labor and to increase the speed and accuracy of the work through multi-tasking ability of Agriculture robot which are identification of field temperature, fire incidents occurred in the field, and intruder detection
228	TEMBMA2601	Solar Powered Automated Multi-Tasking Agricultural Robot (Domains / Renewable)	The main objective of this project is to minimize the labor and to increase the speed and accuracy of the work through multi-tasking ability of Agriculture robot which are identification of field temperature, fire incidents occurred in the field, and intruder detection
229	TEMBMA2829	Driver Behavior Monitoring and Warning with Dangerous Driving Detection Based on the Internet of Vehicles (Controllers / Arduino)	The main objective of the project is to avoid accidents on the roads that are caused by drivers behavior. It keeps monitoring of driving behavior, and recognizes located lane lines and warns the other nearby vehicles using IoV communication
230	TEMBMA2830	Speech Assistive Device for Visually Impaired People Using Raspberry Pi (Controllers / Raspberry pi)	The main objective of the project is to use Speech Assistive Device, which is an automatic document (or) products reader for visually impaired people using OCR technology and it also provides navigation to the blind people to avoid obstacles.
231	TEMBMA2831	Raspberry Pi-Android Based Comatose Patient Monitoring System Using Web Server (Controllers / Raspberry pi)	The main objective of this project is being connected to the health care system through IoT, where doctors can improve the diagnosis accuracy as they are getting all the necessary patient data at hand. In a word, this project allows monitoring patient continuously and remotely.
232	TEMBMA2605	Raspberry Pi-Android Based Comatose Patient Monitoring System Using Web Server (Domains / Biomedical)	The main objective of this project is being connected to the health care system through IoT, where doctors can improve the diagnosis accuracy as they are getting all the necessary patient data at hand. In a word, this project allows monitoring patient continuously and remotely.

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
233	TEMBMA2606	Raspberry Pi-Android Based Comatose Patient Monitoring System Using Web Server (Domains / IOT)	The main objective of this project is being connected to the health care system through IoT, where doctors can improve the diagnosis accuracy as they are getting all the necessary patient data at hand. In a word, this project allows monitoring patient continuously and remotely.
234	TEMBMA2667	Raspberry Pi-Android Based Comatose Patient Monitoring System Using Web Server (Domains / Biomedical)	The main objective of this project is being connected to the health care system through IoT, where doctors can improve the diagnosis accuracy as they are getting all the necessary patient data at hand. In a word, this project allows monitoring patient continuously and remotely.
235	TEMBMA2668	Raspberry Pi-Android Based Comatose Patient Monitoring System Using Web Server (Domains / IOT)	The main objective of this project is being connected to the health care system through IoT, where doctors can improve the diagnosis accuracy as they are getting all the necessary patient data at hand. In a word, this project allows monitoring patient continuously and remotely.
236	TEMBMA2832	Smart AI pothole detector (Controllers / Arduino)	The main objective of this project is to detect potholes in a simple way, inform that to the maintenance and solve the problem and finally make the transport easier.
237	TEMBMA2833	Smart AI pothole detector (Controllers / Raspberry pi)	The main objective of this project is to detect potholes in a simple way, inform that to the maintenance and solve the problem and finally make the transport easier.
238	TEMBMA2609	Smart AI pothole detector (Domains / WSN)	The main objective of this project is to detect potholes in a simple way, inform that to the maintenance and solve the problem and finally make the transport easier.
239	TEMBMA2610	Smart AI pothole detector (Domains / IOT)	The main objective of this project is to detect potholes in a simple way, inform that to the maintenance and solve the problem and finally make the transport easier.
240	TEMBMA2840	IoT Based Organic Farming by Using Aquaponics Method (Controllers / Raspberry pi)	The main objective of this system is to develop an Internet of Things based aquaponics monitoring system which measures and displays parameters like pH level,

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			water level, humidity, temperature, through an IOT platform.
241	TEMBMA2841	IoT Based Organic Farming by Using Aquaponics Method (Controllers / Arduino)	The main objective of this system is to develop an Internet of Things based aquaponics monitoring system which measures and displays parameters like pH level, water level, humidity, temperature, through an IOT platform.
242	TEMBMA2842	IoT Based Organic Farming by Using Aquaponics Method (Controllers / PIC16F77A)	The main objective of this system is to develop an Internet of Things based aquaponics monitoring system which measures and displays parameters like pH level, water level, humidity, temperature, through an IOT platform.
243	TEMBMA2618	IoT Based Organic Farming by Using Aquaponics Method (Domains / IOT)	The main objective of this system is to develop an Internet of Things based aquaponics monitoring system which measures and displays parameters like pH level, water level, humidity, temperature, through an IOT platform.
244	TEMBMA2844	Disinfecting Robot with Ultraviolet Lights (Controllers / 8051)	The main objective of this system is to develop a disinfecting robot with the help of arduino uno, where PIR sensor to detect motion of person and ultrasonic sensor to detect obstacle in its path and UV light is used to kill COVID-19.
245	TEMBMA2845	Disinfecting Robot with Ultraviolet Lights (Controllers / NodeMCU)	The main objective of this system is to develop a disinfecting robot with the help of arduino uno, where PIR sensor to detect motion of person and ultrasonic sensor to detect obstacle in its path and UV light is used to kill COVID-19.
246	TEMBMA2846	Disinfecting Robot with Ultraviolet Lights (Controllers / Arduino)	The main objective of this system is to develop a disinfecting robot with the help of arduino uno, where PIR sensor to detect motion of person and ultrasonic sensor to detect obstacle in its path and UV light is used to kill COVID-19.
247	TEMBMA2852	Intelligent Covid-19 Pandemic Bus Service with Safety Measure (Controllers / NodeMCU)	This project is used for pandemic bus service for safety measure. Initially passenger need to register for e-bus pass card. Whenever they entered into the bus, they need to



### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			swipe their card then their location is sent to cloud server. Based on the distance of travel, the fare is deducted from their e-bus pass card.
248	TEMBMA2853	Intelligent Covid-19 Pandemic Bus Service with Safety Measure (Controllers / Arduino)	This project is used for pandemic bus service for safety measure. Initially passenger need to register for e-bus pass card. Whenever they entered into the bus, they need to swipe their card then their location is sent to cloud server. Based on the distance of travel, the fare is deducted from their e-bus pass card.
249	TEMBMA2854	Intelligent Covid-19 Pandemic Bus Service with Safety Measure (Controllers / Raspberry pi)	This project is used for pandemic bus service for safety measure. Initially passenger need to register for e-bus pass card. Whenever they entered into the bus, they need to swipe their card then their location is sent to cloud server. Based on the distance of travel, the fare is deducted from their e-bus pass card.
250	TEMBMA2625	Intelligent Covid-19 Pandemic Bus Service with Safety Measure (Domains / IOT)	This project is used for pandemic bus service for safety measure. Initially passenger need to register for e-bus pass card. Whenever they entered into the bus, they need to swipe their card then their location is sent to cloud server. Based on the distance of travel, the fare is deducted from their e-bus pass card.
251	TEMBMA2858	Surveillance Monitoring With Deep Learning Using Esp32 (Controllers / Arduino)	The main objective of this project is to create a surveillance monitoring system using deep learning algorithms, the person in the video is been identified and the alert sent to the user and the buzzer gets on.
252	TEMBMA2631	Surveillance Monitoring With Deep Learning Using Esp32 (Domains / IOT)	The main objective of this project is to create a surveillance monitoring system using deep learning algorithms, the person in the video is been identified and the alert sent to the user and the buzzer gets on.
253	TEMBMA2859	IoT-BBMS: Internet Of Things-Based Baby Monitoring System For Smart Cradle (Controllers / Raspberry pi)	The main objective of this project is to keep monitoring of babies condition. Now a days parents are

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			so busy that they don't have enough time to take care of the babies so by using this they can monitor their baby condition from anywhere.
254	TEMBMA2634	IoT-BBMS: Internet Of Things-Based Baby Monitoring System For Smart Cradle (Domains / IOT)	The main objective of this project is to keep monitoring of babies condition. Now a days parents are so busy that they don't have enough time to take care of the babies so by using this they can monitor their baby condition from anywhere.
255	TEMBMA2861	Forest Monitoring By Hierarchical Wireless Sensor Network (Controllers / PIC16F77A)	The main objective of this project is to save the forest areas from fire accidents because forests are important for human survival and social development. This system will update information to the official mobile by sending an SMS if any fire accident occurs or if any toxic gas is present or if anyone comes to cut down the trees
256	TEMBMA2862	Forest Monitoring By Hierarchical Wireless Sensor Network (Controllers / ARM7)	The main objective of this project is to save the forest areas from fire accidents because forests are important for human survival and social development. This system will update information to the official mobile by sending an SMS if any fire accident occurs or if any toxic gas is present or if anyone comes to cut down the trees
257	TEMBMA2865	Smart Door Camera with Facial Recognition Feature and Thermal Screening (Controllers / Raspberry pi)	The main objective of this project is to identify the symptoms of covid-19 by measuring the body temperature of a person. By this, our system can save the people from the spread of covid-19
258	TEMBMA2638	Smart Door Camera with Facial Recognition Feature and Thermal Screening (Domains / Embedded applications)	The main objective of this project is to identify the symptoms of covid-19 by measuring the body temperature of a person. By this, our system can save the people from the spread of covid-19
259	TEMBMA2866	Authorized Covid-19 Entry using Face Mask Detection & Automatic Sanitizer Dispenses & UV Sanitization (Controllers / Raspberry pi)	The main objective of this project is to save the lives of people from sick or covid-19 infected patients and hence to reduce the spread of covid-19 by using this system.
260 ( Page 29 )	TEMBMA2639	Authorized Covid-19 Entry using Face Mask	The main objective of this project is <a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a>

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S.No	Project Code	Project Name	Objective
		Detection & Automatic Sanitizer Dispenses & UV Sanitization (Domains / Image Processing)	to save the lives of people from sick or covid-19 infected patients and hence to reduce the spread of covid-19 by using this system.
261	TEMBMA2868	Vehicle Theft Detector with Remote Engine Locking (Controllers / ARM7)	The main objective of this project is to detect vehicle theft and continuously track latitude and longitude by mobile application
262	TEMBMA2869	Vehicle Theft Detector with Remote Engine Locking (Controllers / Raspberry pi)	The main objective of this project is to detect vehicle theft and continuously track latitude and longitude by mobile application
263	TEMBMA2872	IoT Assisted MQTT for Waste Management in Smart Cities (Controllers / Raspberry pi)	The main objective of this project is to create a smart waste management system which can give alert whenever the bin is full and/or is releasing any toxic gases by sending an SMS to the owner and can also update the information on level of waste in bin to an IOT platform.
264	TEMBMA2875	Vehicle black box system With IoT (Controllers / ARM7)	The main objective of this project is to detect accidents and gives an immediate alert to the hospitals and/or to the police by sending an email through an IoT platform. This system also consists of a voice module circuit which records audio when an accident is happened.
265	TEMBMA2743	Design and Development Of Agri-Bot For Automatic Ploughing, Seeding And Watering (Domains / Robotics)	The main objective of this project is to develop Agri-Bot for automatic ploughing, seeding and watering to reduce the man power and for controlling, uploading data by using a mobile app.
266	TEMBMA2744	Design and Development Of Agri-Bot For Automatic Ploughing, Seeding And Watering (Controllers / Raspberry pi)	The main objective of this project is to develop Agri-Bot for automatic ploughing, seeding and watering to reduce the man power and for controlling, uploading data by using a mobile app.
267	TEMBMA2877	Design and Development Of Agri-Bot For Automatic Ploughing, Seeding And Watering (Controllers / Arduino)	The main objective of this project is to develop Agri-Bot for automatic ploughing, seeding and watering to reduce the man power and for controlling, uploading data by using a mobile app.
268 ( Page 30 )	TEMBMA2721	Design and Development Of Agri-Bot For	The main objective of this project is Email: <a href="mailto:info@takeoffprojects.com">info@takeoffprojects.com</a>

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S.No	Project Code	Project Name	Objective
		Automatic Ploughing, Seeding And Watering (Domains / Robotics)	to develop Agri-Bot for automatic ploughing, seeding and watering to reduce the man power and for controlling, uploading data by using a mobile app.
269	TEMBMA2879	IoT Based Farming Robot Using WSN (Controllers / Arduino)	The main objective of this project is to help the farmer to reduce the human effort by automatic process using Robot
270	TEMBMA2882	IoT Based Farming Robot Using WSN (Controllers / Raspberry pi)	The main objective of this project is to help the farmer to reduce the human effort by automatic process using Robot
271	TEMBMA2646	IoT Based Farming Robot Using WSN (Domains / Robotics)	The main objective of this project is to help the farmer to reduce the human effort by automatic process using Robot
272	TEMBMA2883	Crowd Detection Camera to Prevent Covid-19 (Controllers / Raspberry pi)	The main objective of this project is to detect physical distancing violations in streets and gives alert to the concerned authorities in order to reduce the spread of COVID-19. If any crowd is detected, then it will immediately generates an alert.
273	TEMBMA2647	Crowd Detection Camera to Prevent Covid-19 (Domains / Image Processing)	The main objective of this project is to detect physical distancing violations in streets and gives alert to the concerned authorities in order to reduce the spread of COVID-19. If any crowd is detected, then it will immediately generates an alert.
274	TEMBMA2884	Raspberry Pi Based Covid -19 Ventilator and Health Monitoring Device (Controllers / Raspberry pi)	The main objective of this system is to make ventilation and health monitoring using the Raspberry Pi, it will able to monitor our health and provide information about our heart rate and temperature.
275	TEMBMA2648	Raspberry Pi Based Covid -19 Ventilator and Health Monitoring Device (Domains / Biomedical)	The main objective of this system is to make ventilation and health monitoring using the Raspberry Pi, it will able to monitor our health and provide information about our heart rate and temperature.
276	TEMBMA2885	Home Quarantine Guard Using Face Recognition (Controllers / Raspberry pi)	The main objective of this project is to create security in our daily life through technology. Face recognition using deep learning technique has been used to perform

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			efficient door access control system.
277	TEMBMA2652	Home Quarantine Guard Using Face Recognition (Domains / Image Processing)	The main objective of this project is to create security in our daily life through technology. Face recognition using deep learning technique has been used to perform efficient door access control system.
278	TEMBMA2886	Raspberry Pi Based Smart Wi-Fi Doorbell (Controllers / Raspberry pi)	The main objective of the project is to use the system which is composed of the Doorbell interfaced with Raspberry pi, whoever press the doorbell, the camera gets triggered and capture their face and it is sent to owner through mail. The opening/closing of door can be done through a third party server.
279	TEMBMA2653	Raspberry Pi Based Smart Wi-Fi Doorbell (Domains / IOT)	The main objective of the project is to use the system which is composed of the Doorbell interfaced with Raspberry pi, whoever press the doorbell, the camera gets triggered and capture their face and it is sent to owner through mail. The opening/closing of door can be done through a third party server.
280	TEMBMA2889	Raspberry Pi-Android based Smart Parking System using Web Server (Controllers)	The main objective of this project is to create a smart parking system which detects and finds a parking location for consumer's vehicle and displays the information in an IoT platform. This smart parking feature enables user to find a parking location and a free slot in that parking space.
281	TEMBMA2660	Raspberry Pi-Android based Smart Parking System using Web Server (Domains / OpenCV)	The main objective of this project is to create a smart parking system which detects and finds a parking location for consumer's vehicle and displays the information in an IoT platform. This smart parking feature enables user to find a parking location and a free slot in that parking space.
282	TEMBMA2661	Raspberry Pi-Android based Smart Parking System using Web Server (Domains / IOT)	The main objective of this project is to create a smart parking system which detects and finds a parking location for consumer's vehicle and displays the information in an IoT platform. This smart parking feature enables user to find a parking



### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			location and a free slot in that parking space.
283	TEMBMA2746	Advanced Traffic Violation Control and Penalty System with Web Server (Controllers / Raspberry pi)	The main objective of this project is to create an intelligent traffic violation detection and traffic flow analysis system to monitor and measure red light jumping. This system is based upon RFID technology for identification of vehicles on the road and OpenCV, IoT for charging the vehicle for jumping red light.
284	TEMBMA2890	Advanced Traffic Violation Control and Penalty System with Web Server (Controllers / Arduino)	The main objective of this project is to create an intelligent traffic violation detection and traffic flow analysis system to monitor and measure red light jumping. This system is based upon RFID technology for identification of vehicles on the road and OpenCV, IoT for charging the vehicle for jumping red light.
285	TEMBMA2730	Advanced Traffic Violation Control and Penalty System with Web Server (Domains / OpenCV)	The main objective of this project is to create an intelligent traffic violation detection and traffic flow analysis system to monitor and measure red light jumping. This system is based upon RFID technology for identification of vehicles on the road and OpenCV, IoT for charging the vehicle for jumping red light.
286	TEMBMA2664	Advanced Traffic Violation Control and Penalty System with Web Server (Domains / IOT)	The main objective of this project is to create an intelligent traffic violation detection and traffic flow analysis system to monitor and measure red light jumping. This system is based upon RFID technology for identification of vehicles on the road and OpenCV, IoT for charging the vehicle for jumping red light.
287	TEMBMA2665	Raspberry Pi Based Vehicle Number Plate Recognition Using OCR (Domains / OpenCV)	The main objective of this project is to build a Raspberry Pi based Vehicle Number Plate Recognition system using OCR. The image of the Number plate is captured and is processed to extract the vehicle number with Raspberry pi and whenever the vehicle is detected then the data will be send to the

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			cloud finally.
288	TEMBMA2745	Raspberry Pi Based Vehicle Number Plate Recognition Using OCR (Controllers / Raspberry pi)	The main objective of this project is to build a Raspberry Pi based Vehicle Number Plate Recognition system using OCR. The image of the Number plate is captured and is processed to extract the vehicle number with Raspberry pi and whenever the vehicle is detected then the data will be send to the cloud finally.
289	TEMBMA2892	Raspberry Pi Based Vehicle Number Plate Recognition Using OCR (Controllers / Raspberry pi)	The main objective of this project is to build a Raspberry Pi based Vehicle Number Plate Recognition system using OCR. The image of the Number plate is captured and is processed to extract the vehicle number with Raspberry pi and whenever the vehicle is detected then the data will be send to the cloud finally.
290	TEMBMA2729	Raspberry Pi Based Vehicle Number Plate Recognition Using OCR (Domains / OpenCV)	The main objective of this project is to build a Raspberry Pi based Vehicle Number Plate Recognition system using OCR. The image of the Number plate is captured and is processed to extract the vehicle number with Raspberry pi and whenever the vehicle is detected then the data will be send to the cloud finally.
291	TEMBMA2747	Multi-Directional Rotating Dumping Trailer (Controllers / NodeMCU)	Modern 3 ways dropping dumper' has been conceived by observing the difficulty in unloading the materials. The survey in this regards in several automobile garages, revealed the facts that mostly some difficult methods were adopted in unloading the materials from the trailer
292	TEMBMA2748	Multi-Directional Rotating Dumping Trailer (Controllers / Arduino)	Modern 3 ways dropping dumper' has been conceived by observing the difficulty in unloading the materials. The survey in this regards in several automobile garages, revealed the facts that mostly some difficult methods were adopted in unloading the materials from the trailer
293	TEMBMA2896	Multi-Directional Rotating Dumping Trailer	Modern 3 ways dropping dumper'

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Controllers / ARM7)	has been conceived by observing the difficulty in unloading the materials. The survey in this regards in several automobile garages, revealed the facts that mostly some difficult methods were adopted in unloading the materials from the trailer
294	TEMBMA2731	Multi-Directional Rotating Dumping Trailer (Domains / Mechatronics)	Modern 3 ways dropping dumper' has been conceived by observing the difficulty in unloading the materials. The survey in this regards in several automobile garages, revealed the facts that mostly some difficult methods were adopted in unloading the materials from the trailer
295	TEMBMA2897	Development Of Data Acquisition Robot For Toxic Environmental Monitoring Using WSN (Controllers / Arduino)	The main objective of the project is to develop and implement Data Acquisition Robot for industrial applications that detect the damages inside the oil pipe which cannot be detected by human beings as there is very heavy temperature, pressure and toxic gases inside it.
296	TEMBMA2898	Development Of Data Acquisition Robot For Toxic Environmental Monitoring Using WSN (Controllers / ARM7)	The main objective of the project is to develop and implement Data Acquisition Robot for industrial applications that detect the damages inside the oil pipe which cannot be detected by human beings as there is very heavy temperature, pressure and toxic gases inside it.
297	TEMBMA2672	Development Of Data Acquisition Robot For Toxic Environmental Monitoring Using WSN (Domains / Robotics)	The main objective of the project is to develop and implement Data Acquisition Robot for industrial applications that detect the damages inside the oil pipe which cannot be detected by human beings as there is very heavy temperature, pressure and toxic gases inside it.
298	TEMBMA2905	Anti-Theft technology of museum cultural relics based on internet of things (Controllers / ARM7)	This project proposes a museum anti-theft scheme based on the Internet of Things (IoT) technology, which identifies whether the cultural relics are within the safe range through the passive RFID readers/writers.

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
299	TEMBMA2907	Vehicle and license authentication using finger print (Controllers / Arduino)	The main objective of the project is to authenticate license using fingerprint and if the person places his finger on the sensor then the device tell us whether they had a license or not. This can be done by interlinking the vehicle details with the IoT
300	TEMBMA2908	Vehicle and license authentication using finger print (Controllers / Raspberry pi)	The main objective of the project is to authenticate license using fingerprint and if the person places his finger on the sensor then the device tell us whether they had a license or not. This can be done by interlinking the vehicle details with the IoT
301	TEMBMA2676	Vehicle and license authentication using finger print (Domains / Embedded applications)	The main objective of the project is to authenticate license using fingerprint and if the person places his finger on the sensor then the device tell us whether they had a license or not. This can be done by interlinking the vehicle details with the IoT
302	TEMBMA2913	Heart Attack and Alcohol Detection Sensor Monitoring in Smart Transportation System using Internet of Things (Controllers / PIC16F77A)	The main objective of this project is to create a heartbeat monitoring and heart attack detection system using IoT. The user may set the high as well as low levels of heart beat limit. After setting these limits, the system starts monitoring and as soon as patient heart beat goes above a certain limit, the system sends an alert.
303	TEMBMA2914	Heart Attack and Alcohol Detection Sensor Monitoring in Smart Transportation System using Internet of Things (Controllers / ARM7)	The main objective of this project is to create a heartbeat monitoring and heart attack detection system using IoT. The user may set the high as well as low levels of heart beat limit. After setting these limits, the system starts monitoring and as soon as patient heart beat goes above a certain limit, the system sends an alert.
304	TEMBMA2915	Heart Attack and Alcohol Detection Sensor Monitoring in Smart Transportation System using Internet of Things (Controllers / Raspberry pi)	The main objective of this project is to create a heartbeat monitoring and heart attack detection system using IoT. The user may set the high as well as low levels of heart beat limit. After setting these limits, the system starts monitoring and as soon as

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			patient heart beat goes above a certain limit, the system sends an alert.
305	TEMBMA2917	Multi-sensor Obstacle Detection System via Model-based State-Feedback Control in Smart Cane Design for the Visually Challenged (Controllers / Arduino)	The main objective of this title is to use a multi-sensor obstacle detection system for a smart cane which is proposed via model based state-feedback control strategy to regulate the detection angle of the sensors and minimize the false alerts to the user
306	TEMBMA2918	Multi-sensor Obstacle Detection System via Model-based State-Feedback Control in Smart Cane Design for the Visually Challenged (Controllers / Raspberry pi)	The main objective of this title is to use a multi-sensor obstacle detection system for a smart cane which is proposed via model based state-feedback control strategy to regulate the detection angle of the sensors and minimize the false alerts to the user
307	TEMBMA2919	IOT Based Street Lighting And Traffic Management System (Controllers / NodeMCU)	The main purpose of this project is to invent an intelligent system which can make decisions for luminous control (ON/OFF/DIM) considering the light intensity
308	TEMBMA2924	Data Transmission over sound (Controllers / Arduino)	The main objective of the project is to transmit data over sound, where data-over-sound enables the exchange of data between any devices with a pre-existing Ultrasonic through sound waves
309	TEMBMA2931	Automatic Fault Detection and Location of Transmission Lines using IoT (Controllers / Arduino)	The main objective is to find the fault in the transmission lines and alerting the authorization through IOT that at which wire the fault occurred along with its location
310	TEMBMA2697	Automatic Fault Detection and Location of Transmission Lines using IoT (Domains / Electrical)	The main objective is to find the fault in the transmission lines and alerting the authorization through IOT that at which wire the fault occurred along with its location
311	TEMBMA2936	Bird Feeder and Poultry Conditioning monitoring using Embedded system (Controllers / Arduino)	The main objective of this project is to design an automatic bird feeder that feeds the birds in time which reduces the work for farmer to feed the birds
312	TEMBMA2942	Device to check for harmful chemicals in vegetables and fruits (Controllers / Arduino)	The main objective of the project is to develop a device that would identify and measure the amount of



### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			harmful chemicals present on the skin and inside the vegetables and fruits
313	TEMBMA2945	Student Attendance Management System Based on RFID over web server (Controllers / NodeMCU)	The main objective of this project is to create an RFID system in this application area to detect the presence and absence of the student data which is to be transmitted wirelessly by mobile device, called a tag, which is read by an RFID reader.
314	TEMBMA2947	Student Attendance Management System Based on RFID over web server (Controllers / ARM7)	The main objective of this project is to create an RFID system in this application area to detect the presence and absence of the student data which is to be transmitted wirelessly by mobile device, called a tag, which is read by an RFID reader.
315	TEMBMA2948	Student Attendance Management System Based on RFID over web server (Controllers / Raspberry pi)	The main objective of this project is to create an RFID system in this application area to detect the presence and absence of the student data which is to be transmitted wirelessly by mobile device, called a tag, which is read by an RFID reader.
316	TEMBMA2551	Student Attendance Management System Based on RFID over web server (Domains / IOT)	The main objective of this project is to create an RFID system in this application area to detect the presence and absence of the student data which is to be transmitted wirelessly by mobile device, called a tag, which is read by an RFID reader.
317	TEMBMA2566	Traffic Management by Monitoring Weather Parameters and Pollutants Remotely using Raspberry Pi (Domains / WSN)	The main objective of the project is to measure few weather parameters at a dense location with heavy traffic and provide the corresponding live data by the stand-alone IoT system
318	TEMBMA2569	Garbage Collector Robot (Domains / Robotics)	The main objective of the project is to design and implement a robotic device that collects garbage lying on corridors, large halls or even a house
319	TEMBMA2602	Real Time Application for Vehicle Anti-Theft Detection and Protection with Shock Using Facial Recognition and IoT Notification (Domains / Embedded applications)	The main objective of the project is to take decision and automatically control the motion of the following vehicle through a collision

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			avoidance system consisting of arduino that is implemented to warn the driver using a buzzer.
320	TEMBMA2622	Automatic Pathway for Emergency Vehicle (Domains / IOT)	The main objective of this system is to control the traffic signals and achieving the task in order that the ambulance would be able to cross all the traffic junctions without waiting.
321	TEMBMA2627	Vehicle Safety and Accident Detection System Using IoT (Domains / IOT)	The main objective of the project is to collect crash recorder of the vehicle movements before, during and after a crash, through which an accident can be recognized. When an accident is occurred, immediately the location will be sent to the hospital.
322	TEMBMA2654	Raspberry Pi Based Smart CCTV Surveillance System (Domains / IOT)	The main objective of this project is to monitor the areas where it's installed and send notifications to the owner through SMS when an intruder enters and captures image of that person. And also sends the captured image to the owner's mail.
323	TEMBMA2680	Automatic Pill Reminder For Easy Supervision (Domains / Biomedical)	The main objective of the project is to supervise patient easily by Automatic Pill Reminder. Automatic pill reminder and dispenser setup that can alleviate irregularities in taking prescribed dosage of medicine at the right time dictated by the medical practitioner and switching from approaches that predominantly dependent on human memory to automation with easy supervision is a good sign.
324	TEMBMA2684	Renewable Energy Based Wireless Power Transfer (Domains / Electrical)	The main objective of this project is wireless power transfer (WPT) using renewable source i.e. solar energy. The principle behind WPT is inductive coupling wherein an electric field is generated thus transmitting power from transmitter to receiver
325	TEMBMA2685	Design of Piezoelectricity Harvester using Footwear (Domains / Renewable)	The main objective of the project is to Harvest mechanical energy from human movement is an appropriate approach for acquiring environment-friendly electrical energy.

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S.No	Project Code	Project Name	Objective
326	TEMBMA2688	Arduino-based Amazon's Alexa-controlled home automation (Domains / IOT)	The main objective of this concept is to control home appliances from any where in the world using alexa voice services.
327	TEMBMA2691	Advanced Smart Energy Saving System for Modern Railway Station Platform (Domains / IOT)	The main objective of this project is non-emergency equipment in public building, during non-working hours 4am- 8am there is no need of power and hence power can be saved for modern railway station platform.
328	TEMBMA2706	Improvement in effectiveness of substation Earthing (Domains / Electrical)	The main objective of the project is to calculate maximum fault current, grid resistance, grid current, safe touch and step voltages, ground potential rise, as well as expected touch and step voltage levels for the proper design of grounding grid.
329	TEMBMA3306	IOT Based Biometric Attendance Using Arduino (Domains / IOT)	The main objective of this project is to use Biometric Authentication for attendance management and also uploading the same data to server
330	TEMBMA2823	Smart Helmet Wiper (Controllers / ARM7)	The main theme is to design a helmet that is integrated with a circuit to sense the rain and automatically starts to wipe the helmets eye shield
331	TEMBMA2607	Smart Management of Street lights for Energy Conservation using IoT (Domains / IOT)	The main objective of the project is to conserve energy using IoT for smart management of street lights which is a cost effective, practical, ecofriendly and the safest way to save energy and in this system the light status information can be accessed from anytime and anywhere.
332	TEMBMA2834	Smart Robots For Collision Avoidance Using Neural Networks (Controllers / Arduino)	The main objective of this project is to avoid accidents and collisions, where it works spontaneously when any obstacle or any vehicle comes near to another vehicle and it controls the speed of the vehicle.
333	TEMBMA2835	Smart Robots For Collision Avoidance Using Neural Networks (Controllers / ARM7)	The main objective of this project is to avoid accidents and collisions, where it works spontaneously when any obstacle or any vehicle comes near to another vehicle and it controls the speed of the vehicle.
334	TEMBMA2836	Smart Robots For Collision Avoidance Using	The main objective of this project is

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		Neural Networks (Controllers / Raspberry pi)	to avoid accidents and collisions, where it works spontaneously when any obstacle or any vehicle comes near to another vehicle and it controls the speed of the vehicle.
335	TEMBMA2837	IoT Based Smart Factory Management System (Controllers / Arduino)	The main objective of this project is to monitor and manage processes remotely and change production plans quickly. Moreover, if any emergency cases occurred buzzer gets ON to alert and SMS will be sent to take an immediate action.
336	TEMBMA2838	IoT Based Smart Factory Management System (Controllers / Raspberry pi)	The main objective of this project is to monitor and manage processes remotely and change production plans quickly. Moreover, if any emergency cases occurred buzzer gets ON to alert and SMS will be sent to take an immediate action.
337	TEMBMA2839	Asset Tracking System For Logistics By Using NB-IOT (Controllers / Arduino)	The main objective of this project is to track the assets in a room where they have placed when importing into the industry. The tracking of assets can be done with the help of Bluetooth communication.
338	TEMBMA2952	Voice Based Hot Cold-water Dispenser System Using Raspberry Pi (Controllers / Arduino)	The main objective of this project is to dispense hot and cold water using Heater as a component
339	TEMBMA2953	Voice Based Hot Cold-water Dispenser System Using Raspberry Pi (Controllers / Raspberry pi)	The main objective of this project is to dispense hot and cold water using Heater as a component
340	TEMBMA2216	Smart Waste Management System Using NodeMCU (Domains / WSN)	The main objective of the project is to maintain the level of cleanliness in the city and to create an environment which is better for living as this system constantly check the level of the garbage in the dustbins which are placed in various parts of the city. If a particular dustbin has reached the maximum level, then the employees are informed and they can immediately take certain actions to empty it as soon as possible.
341	TEMBMA2214	Smart Waste Management System Using NodeMCU (Domains / IOT)	The main objective of the project is to maintain the level of cleanliness in the city and to create an environment which is better for living as this system constantly check the

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			level of the garbage in the dustbins which are placed in various parts of the city. If a particular dustbin has reached the maximum level, then the employees are informed and they can immediately take certain actions to empty it as soon as possible.
342	TEMBMA118	Wireless Digital Traffic Signs Of The Future (Controllers / Raspberry pi)	The main objective of this project is to identify a traffic sign which is then wirelessly transmitted to a client receiver residing in the vehicle. The client device is usually a smart phone or a car heads-up display. It can also be displayed on a PC in a car using terminal software.
343	TEMBMA988	Secure Fingerprint Bank Locker With Image Capture (Domains / Image Processing)	The main objective of this project is to Open and close Bank locker using secure fingerprint
344	TEMBRE19_512	Secure Fingerprint Bank Locker With Image Capture (Controllers / Raspberry pi)	The main objective of this project is to Open and close Bank locker using secure fingerprint
345	TEMBMA1282	Raspberry Pi Based Car Door Safety System With Wireless Alert (Controllers / Raspberry pi)	This project presents a car door safety system which has two major features that are sense when car door is opened and alert when the car crash detected. The car door safety system which this project presented is based on popular microcontrollers and sensors, it is easy to build, integrate and low cost. It transmit alert to configured SIM via GSM/GPRS module and also data updated in server when the door opened and crash detected.
346	TEMBMA1537	Arduino Based High Protection Voice Identification Based Bank Locker Security System With Live Image Authentication (Domains / WSN)	The main objective of the project is providing security for people property which can be accessed through face authentication and through voice commands from google assistant.
347	TEMBMA1574	lot Based Liquid Level Monitor Using Raspberry Pi (Controllers)	The main aim of this system is to monitor the water level at rural areas so that they help in detecting the wastage of water and measures can be taken to avoid unnecessary overflowing of water in the areas where monitoring is a difficult task.
348 ( Page 42 )	TEMBMA1575	Raspberry Pi Based Automatic Gas Cylinder	The main aim of this system is to <a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a>

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		Booking Over lot (Controllers)	help the illiterate people to automatically book the gas cylinder whenever the gas is becoming empty.
349	TEMBMA1577	Arduino Based Secure Fingerprint Bank Locker With Image Capture (Controllers)	The main aim of this system is to secure property in the bank by using face validation and fingerprint validation. By this it is more secured.
350	TEMBMA1601	Voice Controlled Home Automation Using Raspberry Pi (Controllers / Raspberry pi)	This project covers most important feature, in which it could provide the complete smart home environment. The voice controlled home automation using Raspberry Pi is proposed for the benefit of easy use and control of devices by elderly and disabled people.
351	TEMBMA1622	Drivers Drowsiness Detection Using Raspberry Pi and Webcam (Controllers / Raspberry pi)	The main objective of this project is to identify the drowsiness state of the driver and generates an alert immediately to wake up the driver so that we can able to prevent road accidents.
352	TEMBMA1623	Drunk And Drive Detection with Vehicle Ignition Lock using Raspberry Pi (Controllers / Raspberry pi)	The main theme of this project is to avoid accidents by detecting whether the person is drunk or not and if is drunk, the engine will automatically stops. By the time the drivers starts the ignition lock, this system will starts to work.
353	TEMBMA1649	Navigation System for Visually Impaired People by Using Raspberry Pi (Controllers / Raspberry pi)	Blind people facing lot of difficulties to lead their life alone. So by using this system blind people can survive easily with voice commands without persons help.
354	TEMBMA1650	Face Recognition System Using Raspberry Pi (Controllers / Raspberry pi)	The main objective of this project is to create security in our daily life through technology. Face recognition using deep learning technique been used to perform efficient door access control system.
355	TEMBMA1657	Solar Based Automatic Irrigation Robot for Farm Monitoring (Controllers / Arduino)	This project "smart management of street lights for energy conservation using iot" is a cost effective, practical, ecofriendly and the safest way to save energy and this system the light status information can be accessed from anytime and anywhere. It clearly tackles the two



### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			problems that world is facing today, saving of energy and also disposal of incandescent lamps, very efficiently.
356	TEMBMA1662	Solar Based Automatic Irrigation Robot for Farm Monitoring (Domains / Android)	This project "smart management of street lights for energy conservation using iot" is a cost effective, practical, ecofriendly and the safest way to save energy and this system the light status information can be accessed from anytime and anywhere. It clearly tackles the two problems that world is facing today, saving of energy and also disposal of incandescent lamps, very efficiently.
357	TEMBMA1711	Iot Based Railway Track Fault Detection By Using Raspberry Pi (Controllers / Raspberry pi)	The main objective of this project is to create a railway track fault detection which automatically detects the faulty rail track without any human intervention. In the proposed system, we are using Ultrasonic sensors will have the benefit of monitoring tracks continuously to detect cracks without human intervention.
358	TEMBMA1720	IOT Based Garbage Monitoring System Using Raspberry Pi (Controllers / Raspberry pi)	The system works with the help of Raspberry Pi and ultrasonic sensor for identifying level of garbage in garbage bin, gas sensor to identify toxins, moisture sensor to identify whether the dry and wet is mixed or not. The collected information is sent through cloud.
359	TEMBMA1740	Surveillance System Using Raspberry Pi (Controllers / Raspberry pi)	The main objective of this project is to monitor the areas where it's installed and send notifications to the owner through SMS when an intruder enters and captures image of that person. And also alerts the user through GSM.
360	TEMBMA1763	Medicine Reminder and Monitoring System for Secure Health using IOT (Domains / IOT)	The main objective of the project is to develop a smart medicine reminder box that is used to remind our loved ones to take medicines on time. This can be used by an individual and it can remind up to three pills taking time and SMS is sent through GSM.
( Page 44 ) 361	TEMBMA1770	The High Security Smart Helmet Using Internet	<a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a> The main objective of this system is

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
		of Things (Domains / IOT)	to design a helmet that provides safety to motorcyclist or to any bike rider by preventing drunk and drive. It detects accident and alert the guardian about accident and engine doesnot get started if alcohol is detected.
362	TEMBMA1866	Advanced IOT Based Combined Remote Health Monitoring, Home Automation and Alarm System (Domains / WSN)	The main objective of the project is health parameter monitoring, medicine time reminding and an automated home system. This system will remind the patient when it's time to take pills through an SMS, email and a voice message and can monitor the health parameters and updates the data to the doctor or patient via an SMS.
363	TEMBMA2014	Smart Mirror Based On Raspberry Pi (Controllers / Raspberry pi)	The main objective of this project is to detect thief when nobody is at home
364	TEMBMA2047	Data Transmission Through Sound Waves (Controllers / Arduino)	The main aim of our project is to transmit data through sound waves. We are using ultrasonic sensor for transmitting data.
365	TEMBRE19_885	Data Transmission Through Sound Waves	The main aim of our project is to transmit data through sound waves. We are using ultrasonic sensor for transmitting data.
366	TEMBMA2075	Intelligent Traffic Signal Control System for Ambulance Using IOT (Controllers / NodeMCU)	The main objective of this system is to control the traffic signals so that the ambulance would be able to cross all the traffic junctions without waiting.
367	TEMBMA2076	Intelligent Traffic Signal Control System for Ambulance Using IOT (Domains / IOT)	The main objective of this system is to control the traffic signals so that the ambulance would be able to cross all the traffic junctions without waiting.
368	TEMBMA2092	Design & Implementation of An Automated Reminder Medicine Box For Old People And Hospital (Controllers / Arduino)	The main aim of the project is to develop a smart medicine remainder box that is used to remind our loved ones to take medicines on time. This can be used by an individual, it can remind upto three pills taking time.
369	TEMBMA2096	AI based fire detection and control system (Controllers / Raspberry pi)	The main objective of this project is to create a Fire alarm and prevention system which is a

### Embedded-Latest-Titles

S.No	Project Code	Project Name	Objective
			real-time monitoring system that detects the presence of smoke/ fire in the air and it has ability to remotely send an alert when a fire is detected.
370	TEMBMA2097	AI based fire detection and control system (Domains / Artificial Intelligence)	The main objective of this project is to create a Fire alarm and prevention system which is a real-time monitoring system that detects the presence of smoke/ fire in the air and it has ability to remotely send an alert when a fire is detected.
371	TEMBMA2107	Implementation of Vision Based Object Tracking Robot (Domains / Image Processing)	The main objective of the project is to make the use of opencv mobile application for acquiring images and instructions from pc or mobile to perform physical movement. Controlling process has been made much more accurate at the cost of programming complexities.
372	TEMBMA2166	Underground Cable Fault Distance Locator Using IOT (Domains / Electrical)	The main theme of this project is to find the underground fault detection using arduino uno with the help of current sensing circuit and uploading the data to an IoT platform.
373	TEMBMA2199	IOT Based Traffic Light Control System For Ambulance (Domains / Android)	The main objective of this system is to control the traffic signals so that the ambulance would be able to cross all the traffic junctions without waiting.

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
1	TMMACO81	Queuing Over Ever-Changing Communication Scenarios in Tactical Networks (Communications / 5G networks)	Clustering Queuing technique for ever changing scenarios in tactical networks
2	TMMASP42	ANNet: A Lightweight Neural Network for ECG Anomaly Detection in IoT Edge Sensors (Signal Processing / Denoising)	
3	TMMAAI202	Identifying Voice Commands With Voice recognition Network Using AI (Artificial Intelligence / Deep Learning)	In this work, a pre-trained voice recognition network is used to detect the voice commands in real-time using microphone
4	TMMAWS16	Clustering based on Whale Optimization Algorithm for IoT over Wireless Sensor Nodes (Wireless Sensor Networks / Protocols)	Clustering of wireless sensor nodes using Whale Optimization Algorithm
5	TMMACO82	Role of Millimeter Wave for Future 5G Mobile Networks: Its Potential, Prospects and Challenges (Communications / 5G networks)	The main objective of the project is to verify the role of mm-waves in future 5G networks
6	TMMACO83	Clustering Routing Algorithm for Wireless Sensor Network Based on Mixed Strategy Game Theory (Communications / 5G networks)	Improving the nodes lifetime in a WSN using Mixed Strategy Game Theory
7	TMMACO84	Enhanced A New Channel Estimation Technique for 5G MIMO Communication Systems (Communications / 5G networks)	A New channel estimation technique called M-Estimator for 5G MIMO systems
8	TMMACO85	Research on Linear Pre-coding Algorithm Based on 5G Mobile Communication Technology (Communications / 5G networks)	Comparison of linear precoding algorithms such as MRT with existing ZF and MMSE
9	TMMAWS17	Lifetime improvement of Wireless Sensor Network Energy and Distance Parameters on LEACH Protocol (Wireless Sensor Networks / Protocols)	Improving the lifetime of nodes in a WSN through residual energy and distance rather than only on probabilities.
10	TMMASP35	Automatic Modulation Classification using Principal Composition Analysis Based Features Selection (Signal Processing / Smoothing)	Classification of Modulation scheme using KNN and SVM a comparative study and Features are selected based on Principal Composition Analysis
11	TMMASP36	ECG Based Authentication using Empirical Mode Decomposition and Support Vector Machines (Signal Processing / Security Applications)	ECG Signals are De-noised through EMD and the support vector machines are used for classification
12	TMMASP37	Development of a New Biometric Authentication Method Based on ECG Signals (Signal Processing / Security Applications)	A New method known as Wave Modeling for extracting features for authentication of ECG Signals
13	TMMASP38	A Novel Method of QRS Peak Detection using	The main objective is detect QRS

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		Time and Amplitude Thresholds and Statistical False Peak Elimination (Signal Processing / Denoising)	Peak using Time and Amplitude thresholding and elimination of false peaks through statistical analysis.
14	TMMASP39	Real Time ECG R-peak Detection by Extremum Sampling (Signal Processing / Denoising)	The main objective of the project is to detect ECG R-peaks using extremities and sampling
15	TMMASP41	Discrimination of Life-Threatening Arrhythmias Using Singular Value, Harmonic Phase Distribution, and Dynamic Time Warping of ECG Signals (Signal Processing / Denoising)	
16	TMMAAN09	Circular Shaped Microstrip Patch Antenna at 2.4GHz using HFSS (Antenna / Patch Antenna)	The main objective of this project is to design a circular microstrip patch antenna at 2.4GHz frequencies using HFSS for WSN applications.
17	TMMAAN15	Radiation pattern improvement of I shaped micro strip patch antenna using glass-Pyrex substrate compared with polystyrene substrate in X band application (Antenna / Patch Antenna)	In this project we will design the I shaped micro strip antenna by using HFSS. Then will change the different substrates and compare those to check which substrate have the better radiation pattern in X band application.
18	TMMAIP378	Segmentation and Classification of Melanoma Skin Cancer using Deep Learning Techniques (Image Processing / Image Segmentation)	The main objective of this project is to segment and classify the skin cancer images using morphological operations along with machine learning techniques.
19	TMMAIP377	Comparison of Different Filtering, Smoothing Filters in Digital Image Processing (Image Processing / Image Denoising)	In this work, comparison of quality and efficiency of several filtering/smoothing techniques with respective of their smoothing value and neighborhood size will take place.
20	TMMAIP403	Parking Lot Availability System Using Matlab (Image Processing / Image Segmentation)	This model will predict the number of lots available in a parking place
21	TMMAAI200	Speech Emotion Recognition Using Machine Learning (Artificial Intelligence / Artificial Neural Network)	Emotion of the recorded voice (Anger, Happy...) is recognized using machine learning algorithm
22	TMMAAI201	Drone Detection & Drone Type Classification Using Deep Learning (Artificial Intelligence / Deep Learning)	This model will detect, classify the drone and type of the drone (Tri-copter/quadcopter)
23	TMMACO80	Efficient Cell-Specific Beamforming For Large Antenna Arrays (Communications / 5G networks)	An efficient method for designing broadbeams with spatially flat array factor and efficient power utilization

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			for cell-specific coverage in communication systems equipped with large antenna arrays is proposed.
24	TMMAAI199	3D U-Net for Brain Tumor Segmentation (Artificial Intelligence / Deep Learning)	The main objective of this project is to segment the tumor in Brain using U-Net architecture which is a deep learning techniques.
25	TMPGCO39	Wideband Millimeter-wave OFDM Uplink with Hybrid Receiving. (Communications / Modulation Techniques)	The main objective of this project is to construct an OFDM uplink transmitter for data uplink.
26	TMMACO78	Wideband Millimeter-wave OFDM Uplink with Hybrid Receiving. (Communications / Modulation Techniques)	The main objective of this project is to construct an OFDM uplink transmitter for data uplink.
27	TMPGAI99	Video Image Deblurring Algorithm Based on Denoising Engine (Artificial Intelligence / Deep Learning)	A good video deblurring effect and certain robustness to noise is suggested in this work
28	TMMAIP399	Video Image Deblurring Algorithm Based on Denoising Engine (Image Processing / Image Retrieval)	A good video deblurring effect and certain robustness to noise is suggested in this work
29	TMMAAI190	Video Image Deblurring Algorithm Based on Denoising Engine (Artificial Intelligence / Deep Learning)	A good video deblurring effect and certain robustness to noise is suggested in this work
30	TMMAIP382	Detection of Blood Cells in Human Blood Samples Using Microscopic Images (Image Processing / Image Segmentation)	The primary goal of blood cell segmentation is to isolate defective/abnormal cells from a complex background and segment it into morphological components using image processing techniques like contrast enhancement, thresholding, morphological operations etc.
31	TMMACO73	Under Water Wireless Communication using Matlab with Modem (Communications / Modulation Techniques)	A Simulink model for IDMA-OFDM is presented. Its performance was observed on BER graph which displayed a BER v/s SNR plot.
32	TMMACO72	A Code to Design the DM Transmitter and Receiver (Communications / Modulation Techniques)	The main objective is to develop the DM transmitter and receiver which will provide low channel bandwidth and is inexpensive.
33	TMMACO71	Digital Hearing Aid System Design (Communications / Modulation Techniques)	The main objective is to develop noise reduction, frequency, and amplitude filters for a configurable digital hearing aid (DHA). Our digital hearing aid overcomes the shortcomings of the traditional



### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			analog model
34	TMMAAN14	Reconfigurable antenna for 5G technology-CST software (Antenna / Patch Antenna)	The main objective of this design is to construct an antenna for 5G technology applications using CST software.
35	TMMAAN13	Design of Dual Band Flexible Antenna for WLAN Applications & Comparing its Return Loss WIMW Shaped Antenna. (Antenna / Patch Antenna)	In this project we will design the T dual band, H dual band, W dual band, Rectangular, Circular and Hexagonal shapes by Using HFSS software. After completion of that design process, two bands are compared and plotted the return loss, radiation pattern, gain graphs.
36	TMMAAI168	Multi Modal Image Fusion Techniques to Detect Brain Tumor (Artificial Intelligence / Deep Learning)	The main goal of this work is to design efficient automatic brain tumor classification based on CNN and detection based on YOLO.
37	TMMAAI170	Deblocking the Image Using Convolutional Neural Networks (Artificial Intelligence / Deep Learning)	The main goal of this work is to deblock the compressed JPEG using denoising convolutional neural networks.
38	TMMAIP380	An X-ray Image Enhancement Algorithm for Dangerous Goods in Airport Security Inspection (Image Processing / Image Enhancement)	Study the problem of "airport security X-ray image enhancement", and proposes an image enhancement algorithm of USM+CLAHE.
39	TMPGAI96	An X-ray Image Enhancement Algorithm for Dangerous Goods in Airport Security Inspection (Artificial Intelligence / Deep Learning)	Study the problem of "airport security X-ray image enhancement", and proposes an image enhancement algorithm of USM+CLAHE.
40	TMMAWS14	Optimization of Wireless Sensor Networks Using the ANT COLONY OPTIMIZATION (Wireless Sensor Networks / Routing Concepts)	Ant colony Optimization finds the optimal path with the least average energy consumption and prolong the survival time of the Wireless sensor network.
41	TMMAIP379	Determination and Analysis of Arthritis Using Digital Image Processing Techniques (Image Processing / Image Segmentation)	Thickness & condition of Arthritis detection using image processing techniques like anisotropic diffusion, B- spline, canny edge detection, log edge detection, control points adjustment.
42	TMPGAI86	Brain Disease Classification & Brain Age Estimation Using CNN (Artificial Intelligence / Deep Learning)	Brain disease like Alzheimer, Mild Cognitive and Healthy Control is classified using deep learning CNN technique and brain age is estimated based on classified

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			output. Finally output accuracy is compared with SVM machine learning technique.
43	TMMAAI166	Brain Disease Classification & Brain Age Estimation Using CNN (Artificial Intelligence / Deep Learning)	Brain disease like Alzheimer, Mild Cognitive and Healthy Control is classified using deep learning CNN technique and brain age is estimated based on classified output. Finally output accuracy is compared with SVM machine learning technique.
44	TMMAWS13	A Node Overhaul Scheme for Energy Efficient Clustering in Wireless Sensor Networks (Wireless Sensor Networks / Protocols)	The main objective of this project is to use the USC-LEACH protocol to enhance the network life time and generate clusters of uniform size.
45	TMMAIP376	Segmentation & Classification of Plasmodium Species Using Image Processing and Machine Learning Techniques (Image Processing / Image Segmentation)	The main objective of this work is to segment Plasmodium species blood smear using Kapur and Otsu strategy and classifying the type of species using Machine Learning Technique.
46	TMMAIP374	Clustering Based Blood Smear Image Segmentation Techniques (Image Processing / Image Segmentation)	This work examines different clustering-based image segmentation algorithms that are currently in use. Some of them are K means, Watershed, Edge based, Region growing
47	TMMAIP375	PSNR Comparison of Lung Images Over Histogram Equalization & Several Techniques (Image Processing / Image Enhancement)	Here, we will compare the enhancement metric of lung images with histogram equalization over several methods. Many image enhancement/filters schemes like median, wiener, linear contrast enhancement and unsharp filters will be implemented and compared. The Performance of all these methods will be analyzed and a number of Practical experiments of real time images will be presented.
48	TMMACO64	Autocorrelation Based Spectrum Sensing of FBMC Signal (Communications / 5G networks)	The main aim of the project is to develop FBMC signal
49	TMMACO63	Autocorrelation Based Spectrum Sensing of FBMC Signal (Communications / Modulation Techniques)	The main aim of the project is to develop FBMC signal
50	TMMAWS11	An Improved Energy Efficient Clustering Protocol to Prolong the Lifetime of the WSN-Based IOT	The main objective of this project is to reduce the energy consumption in Wireless Sensor Networks.

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Wireless Sensor Networks / Protocols)	
51	TMMAAI153	A Novel Algorithm for Dehazing using Convolution Neural Network (Artificial Intelligence / Deep Learning)	The main objective of this project is to dehaze the images using Deep Learning techniques.
52	TMMASP32	Spatial Polarimetric Time Frequency Distribution Based DOA Estimation Combining ESPRIT with MUSIC (Signal Processing / Denoising)	The main objective is DOA estimation of HFSWR echo signals. This study uses a polarisation sensitive array as a model and combines it with a time-frequency analysis approach for DOA estimation of HFSWR echo signals, allowing it to fully use the polarisation sensitive array.
53	TMMAIP367	An Adaptive Image Steganography Method Based on Histogram of Oriented Gradient and PVD-LSB Techniques (Image Processing / Security Applications)	The main objective of the project is to provide security for the images using histogram of oriented techniques.
54	TMMASP31	DOA Estimation for Wideband LFM Signals with a Few Snapshots (Signal Processing)	The main aim of the project is to estimate DOA and producing angular spectrum with lower side lobe levels.
55	TMMAAN10	Design of Fractal Based Micro Strip Rectangular Patch Antenna for Multi band Applications (Antenna / Patch Antenna)	The main objective of this paper is to design an micro strip patch fractal antenna for various 5G applications
56	TMMAAN11	Gain Enhancement with Miniaturized Dual Band T-Shaped, H-Shaped, E-Shaped and U-Shaped Antennas for WLAN Applications (Antenna / Patch Antenna)	The main objective of this project is to design an antenna with four different shapes which will be helps in dual band gain enhancement applications.
57	TMMACO77	A comparison algorithm for sensing the spectrum using deep learning techniques (Communications / 5G networks)	The main objective of this project is to sensing the spectrum using energy, entropy and deep learning techniques.
58	TMMAIP393	Satellite Image Classification Method Using ELBP and SVM Classifier (Image Processing / Image Detection)	In this project a convolutional neural network for automated wildfire detection on high-resolution aerial photos is presented.
59	TMPGAI91	Satellite Image Classification Method Using ELBP and SVM Classifier (Artificial Intelligence / Deep Learning)	In this project a convolutional neural network for automated wildfire detection on high-resolution aerial photos is presented.
60	TMMACO76	Turbo Modulation Identification Algorithm for OFDM Software Defined (Communications / Modulation Techniques)	
61 ( Page 6 )	TMMACO75	Automatic Modulation Classification in Real TX	The main objective of the project is <a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a>

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		& RX Environment Using SDR (Communications / Modulation Techniques)	to modulate the signals obtained from transmitter and receiver of software defined radio.
62	TMMAAI177	Secure Authentication using Iris, Face and Signature (Artificial Intelligence / Deep Learning)	The main objective of this project is to made a three phase authentication system using Iris, Face and signature.
63	TMMAAI162	A Finger Vein Recognition System (Artificial Intelligence / Deep Learning)	The main objective of finger vein identification provides various security ways for authentication purposes. In this paper we present a complete finger vein identification system using deep machine learning with Convolutional Neural Network (CNN)
64	TMMAIP369	An Image Encryption and Decryption Using AES Algorithm (Image Processing / Security Applications)	The main objective of the project is to provide security for images using advanced encryption techniques.
65	TMMACO65	On the Performance of Quickest Detection Spectrum Sensing (Communications)	The main objective is to detect the quickest change in spectrum sensing.
66	TMMAAI204	Malaria Detection Using Image Processing & Machine Learning (Artificial Intelligence / Deep Learning)	Presence of malaria infection is implemented using watershed segmentation and support vector machine (SVM) techniques
67	TMMAIP404	Texture Based Image Segmentation Using Image Processing Techniques (Image Processing / Image Segmentation)	Texture based segmentation using image processing techniques like grayscale conversion, morphological operations, boundary plotting etc.
68	TMMACO79	Implementation of Evolutionary Algorithms for Improving Energy Consumption in Wireless Sensor Networks (Communications / 5G networks)	The main objective of the project is to calculate the energy consumption using ABC, ACO and PSO optimization techniques.
69	TMMAAI194	YOLO Based Real-Time Human Detection for Smart Video Surveillance at the Edge (Artificial Intelligence / Deep Learning)	This work introduces an approach based on YOLOv2 for human detection.
70	TMPGAI104	YOLO Based Real-Time Human Detection for Smart Video Surveillance at the Edge (Artificial Intelligence / Deep Learning)	This work introduces an approach based on YOLOv2 for human detection.
71	TMMAIP383	Securing Medical Images using Encryption and LSB Steganography (Image Processing / Security Applications)	This research focuses on preserving the confidentiality and integrity of the medical images by applying steganography technique.
72	TMPGAI103	Securing Medical Images using Encryption and LSB Steganography	This research focuses on preserving the confidentiality and integrity of

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Artificial Intelligence / Deep Learning)	the medical images by applying steganography technique.
73	TMMAAI192	Real-Time Weed Detection using Machine Learning and Stereo-Vision (Artificial Intelligence / Deep Learning)	In this work weed detection system is implemented using machine learning and image processing techniques to detect weeds from plant image
74	TMPGAI101	Real-Time Weed Detection using Machine Learning and Stereo-Vision (Artificial Intelligence / Deep Learning)	In this work weed detection system is implemented using machine learning and image processing techniques to detect weeds from plant image
75	TMMAAI191	COVID-19 Monitoring System using Social Distancing and Face Mask Detection on Surveillance video datasets (Artificial Intelligence / Deep Learning)	This work proposes face detection and face mask classification using object detection, clustering and Convolution Neural Network (CNN)
76	TMPGAI100	COVID-19 Monitoring System using Social Distancing and Face Mask Detection on Surveillance video datasets (Artificial Intelligence / Deep Learning)	This work proposes face detection and face mask classification using object detection, clustering and Convolution Neural Network (CNN)
77	TMMAAI188	Infrared Image Pedestrian Detection via YOLO-V3 (Artificial Intelligence / Deep Learning)	This paper proposes to detect pedestrians in infrared images at night through the YOLO-V3 detection framework.
78	TMPGAI95	Infrared Image Pedestrian Detection via YOLO-V3 (Artificial Intelligence / Deep Learning)	This paper proposes to detect pedestrians in infrared images at night through the YOLO-V3 detection framework.
79	TMMAAI193	Robust Skin Disease Classification by Distilling Deep Neural Network Ensemble for the Mobile Diagnosis of Herpes Zoster (Artificial Intelligence / Deep Learning)	This study aimed to distinguish Herpes Zoster from the other skin diseases
80	TMPGAI102	Robust Skin Disease Classification by Distilling Deep Neural Network Ensemble for the Mobile Diagnosis of Herpes Zoster (Artificial Intelligence / Deep Learning)	This study aimed to distinguish Herpes Zoster from the other skin diseases
81	TMMAIP384	A New Image Encryption Algorithm for Grey and Color Medical Images (Image Processing / Security Applications)	This work introduces a new algorithm for encrypting medical images based on image blocks and chaos
82	TMPGAI105	A New Image Encryption Algorithm for Grey and Color Medical Images (Artificial Intelligence / Deep Learning)	This work introduces a new algorithm for encrypting medical images based on image blocks and chaos
83	TMMAIP385	A Residual Chaotic System for Image Security and Digital Video Watermarking	Here a general Residual Chaotic System (RCS) for image security in



### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Image Processing / Security Applications)	heterogeneous multimedia is implemented
84	TMPGAI106	A Residual Chaotic System for Image Security and Digital Video Watermarking (Artificial Intelligence / Deep Learning)	Here a general Residual Chaotic System (RCS) for image security in heterogeneous multimedia is implemented
85	TMMAAI164	Weed Identification Using Deep Learning and Image Processing in Vegetable Plantation (Artificial Intelligence / Deep Learning)	The main objective of this project is to detect crop/plant detection using deep learning algorithm YOLO v22.
86	TMMAIP388	Weed Identification Using Deep Learning and Image Processing in Vegetable Plantation (Image Processing / Image Segmentation)	The main objective of this project is to detect crop/plant detection using deep learning algorithm YOLO v22.
87	TMPGAI85	Weed Identification Using Deep Learning and Image Processing in Vegetable Plantation (Artificial Intelligence / Deep Learning)	The main objective of this project is to detect crop/plant detection using deep learning algorithm YOLO v22.
88	TMMAAI180	A Novel 3D Object Watermarking Technique Using Hash Key Cryptography (Artificial Intelligence / Deep Learning)	Outlines the implementation of 3D watermarking in this paper and then provide the basic 3D watermarking criteria. Fundamental attacks and their solutions to the watermarking of 3D geometry are then reviewed.
89	TMMAIP389	A Novel 3D Object Watermarking Technique Using Hash Key Cryptography (Image Processing / Security Applications)	Outlines the implementation of 3D watermarking in this paper and then provide the basic 3D watermarking criteria. Fundamental attacks and their solutions to the watermarking of 3D geometry are then reviewed.
90	TMPGAI87	A Novel 3D Object Watermarking Technique Using Hash Key Cryptography (Artificial Intelligence / Deep Learning)	Outlines the implementation of 3D watermarking in this paper and then provide the basic 3D watermarking criteria. Fundamental attacks and their solutions to the watermarking of 3D geometry are then reviewed.
91	TMMAIP391	A Single Neural Network for Mixed Style License Plate Detection and Recognition (Image Processing / Image Detection)	In ALPRNet, two fully convolutional one-stage object detectors are used to detect and classify LPs and characters simultaneously, which are followed by an assembly module to output the LP strings.
92	TMPGAI89	A Single Neural Network for Mixed Style License Plate Detection and Recognition (Artificial Intelligence / Deep Learning)	In ALPRNet, two fully convolutional one-stage object detectors are used to detect and classify LPs and characters simultaneously, which are followed by an assembly module to output the LP strings.
93	TMMAAI183	A Supervised Segmentation Network for	In this paper, an end-to-end fully



### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		Hyperspectral Image Classification (Artificial Intelligence / Deep Learning)	convolutional segmentation network (FCSN) is proposed to simultaneously identify land-cover labels of all pixels in a HIS cube.
94	TMMAIP392	A Supervised Segmentation Network for Hyperspectral Image Classification (Image Processing / Image Segmentation)	In this paper, an end-to-end fully convolutional segmentation network (FCSN) is proposed to simultaneously identify land-cover labels of all pixels in a HIS cube.
95	TMPGAI90	A Supervised Segmentation Network for Hyperspectral Image Classification (Artificial Intelligence / Deep Learning)	In this paper, an end-to-end fully convolutional segmentation network (FCSN) is proposed to simultaneously identify land-cover labels of all pixels in a HIS cube.
96	TMMAAI186	Automated Food image Classification using Deep Learning approach (Artificial Intelligence / Deep Learning)	In this paper, automated methods of food classification using deep learning approaches are presented. SqueezeNet and VGG-16 Convolutional Neural Networks are used for food image classification.
97	TMMAIP395	Automated Food image Classification using Deep Learning approach (Image Processing / Image Detection)	In this paper, automated methods of food classification using deep learning approaches are presented. SqueezeNet and VGG-16 Convolutional Neural Networks are used for food image classification.
98	TMPGAI93	Automated Food image Classification using Deep Learning approach (Artificial Intelligence / Deep Learning)	In this paper, automated methods of food classification using deep learning approaches are presented. SqueezeNet and VGG-16 Convolutional Neural Networks are used for food image classification.
99	TMMAAI187	Whole Slide Images Based Cervical Cancer Classification Using Self-Supervised Learning and Multiple Instance Learning (Artificial Intelligence / Deep Learning)	In this paper, we propose to combine self-supervised learning with multiple instances learning to deal with large WSIs datasets only with the reported diagnoses as labels.
100	TMMAIP396	Whole Slide Images Based Cervical Cancer Classification Using Self-Supervised Learning and Multiple Instance Learning (Image Processing / Image Detection)	In this paper, we propose to combine self-supervised learning with multiple instances learning to deal with large WSIs datasets only with the reported diagnoses as labels.
101	TMPGAI94	Whole Slide Images Based Cervical Cancer Classification Using Self-Supervised Learning and Multiple Instance Learning (Artificial Intelligence / Deep Learning)	In this paper, we propose to combine self-supervised learning with multiple instances learning to deal with large WSIs datasets only

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			with the reported diagnoses as labels.
102	TMMAAI189	Image Quality Enhancement for Wheat Rust Diseased Images Using Histogram Equalization Technique (Artificial Intelligence / Deep Learning)	In this study, different types of image enhancement techniques like histogram equalization and CLAHE are discussed to enhance the wheat plant image.
103	TMPGAI97	Image Quality Enhancement for Wheat Rust Diseased Images Using Histogram Equalization Technique (Artificial Intelligence / Deep Learning)	In this study, different types of image enhancement techniques like histogram equalization and CLAHE are discussed to enhance the wheat plant image.
104	TMMAIP397	Image Quality Enhancement for Wheat Rust Diseased Images Using Histogram Equalization Technique (Image Processing / Image Enhancement)	In this study, different types of image enhancement techniques like histogram equalization and CLAHE are discussed to enhance the wheat plant image.
105	TMMAAI171	Identification of currency with artificial intelligence techniques (Artificial Intelligence / Deep Learning)	The main objective of this project is to classify original or fake note, and if the note is original then need to find the denomination of the note.
106	TMPGAI98	Identification of currency with artificial intelligence techniques (Artificial Intelligence / Deep Learning)	The main objective of this project is to classify original or fake note, and if the note is original then need to find the denomination of the note.
107	TMMAIP398	Identification of currency with artificial intelligence techniques (Image Processing / Image Detection)	The main objective of this project is to classify original or fake note, and if the note is original then need to find the denomination of the note.
108	TMMAAI176	Hand Gesture Based Media Player (Artificial Intelligence / Deep Learning)	The main aim of the project is to control the media player using hand gestures and from the recognized face.
109	TMMAAN12	Mutual Coupling Reduction in Antenna Arrays by Using Circular Complementary (Antenna / Patch Antenna)	The main objective of this project is to design array of antenna for mutual coupling reduction applications.
110	TMMAAI173	Classification of Eye Fundus using Machine Learning Techniques (Artificial Intelligence / Deep Learning)	The main objective of the project is to get the dataset of Healthy and diabetic eye is taken and KNN and SVM classification is done.
111	TMMACO67	Generalized DFT-S-OFDM Waveforms Without Cyclic Prefix (Communications / Modulation Techniques)	This paper deals with generalized discrete Fourier transform-spread-orthogonal frequency division multiplexing (G-DFT-s-OFDM) waveforms, which

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			replace the cyclic prefix of traditional OFDM/DFT-s-OFDM with an internal guard period.
112	TMMACO66	A Comparative Study of PAPR Reduction Techniques for OFDM Systems in Different Channels (Communications / MIMO Transmissions)	In this paper, we investigate the PAPR reduction techniques, which are amplitude clipping selective mapping (SLM) and partial transmit scheme is performed in AWGN channel ,Rayleigh Channel and Rician Channels respectively , PTS method performs better than SLM, Amplitude clipping in reducing PAPR.
113	TMMAAI161	Content Based Video Retrieval (Artificial Intelligence / Artificial Neural Network)	Content-based retrieval allows finding information by searching its content rather than its attributes. The main objective of this project is to provide the best video retrieval process.
114	TMMAIP366	Feature Detection and Matching with Lineous Adjustment and Adaptive Thresholding (Image Processing / Image Enhancement)	In this work, feature matching is performed using FAST feature descriptor.
115	TMMACO86	COMPARATIVE STUDY OF LINEAR PRECODING TECHNIQUES (Communications / MIMO Transmissions)	
116	TMPGCO40	COMPARATIVE STUDY OF LINEAR PRECODING TECHNIQUES (Communications / MIMO Transmissions)	
117	TMMAIP381	A New Approach to Hiding Data in the Images Using Steganography (Image Processing / Security Applications)	The main objective of this project is to provide a three stage network by using AES, RC5 and watermarking techniques
118	TMMAAI149	MRI Breast Tumor Segmentation Using Different Encoder and Decoder Using CNN Architecture (Artificial Intelligence / Deep Learning)	The main objective of this method is to segment the tumor part of the medical image. This segmentation is mainly depends on the CNN techniques by using Unet Architecture. By using this architecture, the tumor in the medical images can be easily segmented
119	TMMAAI135	Anomalous behaviour detection for under water fish using AI techniques (Artificial Intelligence / Deep Learning)	An anomalous behavior of fish usually indicates a symptom of disease or sign of creatures being under stress, and deserves attention and analysis to find out possible causes. Here, detection & behavior

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			(normal/abnormal) of fish is performed using deep learning techniques.
120	TMMAAI53	Automatic Vehicle License Plate Recognition Using Optimal K-Means with Convolutional Neural Network for Intelligent Transportation Systems (Artificial Intelligence / Artificial Neural Network)	This project presents an effective deep learning-based VLPR model using optimal K-means clustering-based segmentation and convolutional neural network (CNN) based recognition, called OKM-CNN model for recognition of number plate.
121	TMMAAI54	Small Object Detection Base on YOLOv3 for Pedestrian Recognition (Artificial Intelligence / Deep Learning)	Object detection is the most important algorithm in pattern recognition. This process helps us to find the count of persons in the video, track the persons using deep learning techniques.
122	TMPGAI77	Small Object Detection Base on YOLOv3 for Pedestrian Recognition (Artificial Intelligence / Deep Learning)	Object detection is the most important algorithm in pattern recognition. This process helps us to find the count of persons in the video, track the persons using deep learning techniques.
123	TMMAAI52	Food Detection with Image Processing Using Convolutional Neural Network (CNN) Method (Artificial Intelligence / Deep Learning)	Currently, the payment process at restaurants is still manual and inefficient because it uses a cash register. To reduce difficulty in this process, we introduce a novel food recognition and automatic bill generation using deep learning techniques.
124	TMMAAI51	Detecting Tampered Regions in JPEG Images via CNN (Artificial Intelligence / Deep Learning)	Digital pictures are used as evidence in criminal investigations. Therefore, it is essential to check whether they have been tampered with or not. In this study, we propose a method for detecting the tampered region in a JPEG image by using a convolutional neural network (CNN).
125	TMMAIP63	A Novel High Capacity Data Hiding Algorithm Using Salt and Pepper Noise (Image Processing / Security Applications)	In this paper, a novel algorithm is proposed by merging two concepts of data hiding and salt-pepper noise removal to increase the capacity of the data hiding security
126	TMMAAI55	Image Denoising Using Deep Learning: Convolutional Neural Network (Artificial Intelligence / Deep Learning)	Image denoising is an important task in various applications like object detection, segmentation and recognition. But when the noise content is high then the noise

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			removal is very difficult. Hence, we provided a technique using the deep learning technique for denoising images.
127	TMMAAI57	Optimal Feature Selection-Based Medical Image Classification Using Deep Learning Model in Internet of Medical Things (Artificial Intelligence / Deep Learning)	In this research article, we have introduced an improved classifier i.e., Optimal Deep Learning (DL) for classification of lung cancer, brain image, and Alzheimer's disease
128	TMMAAI58	Microorganism Image Recognition Based on Deep Learning Application (Artificial Intelligence / Deep Learning)	This research studies the possibility to use image classification and deep learning methods to recognize bacteria and yeast which reduces the analyzing time of microorganism classification and eliminates human error compared to the classic biological techniques
129	TMMAAI59	Weakly Supervised Deep Learning for COVID-19 Infection Detection and Classification from CT Images (Artificial Intelligence / Artificial Neural Network)	An outbreak of a novel coronavirus disease (i.e., COVID-19) has been recorded in Wuhan, China since late December 2019, which subsequently became pandemic around the world. In this study, we propose a weakly supervised deep learning strategy for detecting and classifying COVID-19 infection from CT images.
130	TMMAAI60	Simultaneous Cloud Detection and Removal from Bitemporal Remote Sensing Images Using Cascade Convolutional Neural Networks (Artificial Intelligence / Deep Learning)	Clouds and cloud shadows heavily affect the quality of the remote sensing images and their application potential. In this article, we propose an integrated cloud detection using cascade convolutional neural networks, which provides accurate cloud detection systems.
131	TMMAAI61	A Proficient Evaluation with the Pre-Term Birth Classification in ECG Signal Using KNN (Artificial Intelligence / Artificial Neural Network)	The rate of premature births is rising all over the world and there is still no forecast against the births. The purpose of this work is to classify the fetal ECG heartbeats, using the KNN classifier, and to predict preterm birth.
132	TMMACO16	Energy efficiency Aware Joint Resource Allocation & Power Allocation in Multi User Beam Forming (Communications / 5G networks)	In this paper, we propose a joint resource allocation and power allocation algorithm in multi-user beamforming mode, which aims at maximizing the energy efficiency, and also takes UE requirements and spectrum efficiency into consideration

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
133	TMPGCO22	Energy efficiency Aware Joint Resource Allocation & Power Allocation in Multi User Beam Forming (Communications / 5G networks)	In this paper, we propose a joint resource allocation and power allocation algorithm in multi-user beamforming mode, which aims at maximizing the energy efficiency, and also takes UE requirements and spectrum efficiency into consideration
134	TMMACO17	An Efficient Resource Allocation Algorithm for D2D Communications Based on NOMA (Communications / Device-to-Device Communications)	This paper proposes a joint sub-channel and power allocation algorithm for D2D communication based on NOMA to maximize the uplink energy efficiency and throughput of the mobile communication system.
135	TMPGCO21	An Efficient Resource Allocation Algorithm for D2D Communications Based on NOMA (Communications / Device-to-Device Communications)	This paper proposes a joint sub-channel and power allocation algorithm for D2D communication based on NOMA to maximize the uplink energy efficiency and throughput of the mobile communication system.
136	TMMACO18	MIMO Spectrum Sensing for Cognitive Radio-Based Internet of Things (Communications / MIMO Transmissions)	The emerging cognitive radio-based Internet of Things (CR-IoT) network provides a novel paradigm solution for IoT devices to efficiently utilize spectrum resources which helps to identify the primary user presence under Gaussian interference conditions
137	TMPGCO20	MIMO Spectrum Sensing for Cognitive Radio-Based Internet of Things (Communications / MIMO Transmissions)	The emerging cognitive radio-based Internet of Things (CR-IoT) network provides a novel paradigm solution for IoT devices to efficiently utilize spectrum resources which helps to identify the primary user presence under Gaussian interference conditions
138	TMMAAN01	Design of Modified U-Slot Multiband Circular Patch Antenna with Cylindrical Dielectric Resonator Antenna (Antenna / Patch Antenna)	In this project a single circular patch antenna is designed by introducing a modified U- slot to operate at multiple frequencies i.e. 3.5GHz, 5GHz and 6.5GHz. The Slots are incorporated into the patch so that the antenna has its applications in WLAN, Extended WiMAX and International Mobile Communication Systems.
( Page 15 )	TMMACO20	Deep Learning-based Sum Data Rate and Energy Efficiency Optimization for	The increasing demands for massive connectivity, low latency,



### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		MIMO-NOMA Systems (Communications / MIMO Transmissions)	and high reliability of future communication networks require new techniques. Hence, a deep learning-based MIMO-NOMA framework for maximizing the sum data rate and energy efficiency is proposed.
140	TMPGCO18	Deep Learning-based Sum Data Rate and Energy Efficiency Optimization for MIMO-NOMA Systems (Communications / MIMO Transmissions)	The increasing demands for massive connectivity, low latency, and high reliability of future communication networks require new techniques. Hence, a deep learning-based MIMO-NOMA framework for maximizing the sum data rate and energy efficiency is proposed.
141	TMMACO21	Energy Efficiency Optimization for MIMO Visible Light Communication Systems (Communications / MIMO Transmissions)	Focus on maximizing the energy efficiency (EE) of MIMO VLC systems, where the non-negativeness of the transmit signal, the optical and electrical power constraints, and the data rate and bit error rate (BER) requirements are taken into account.
142	TMPGCO17	Energy Efficiency Optimization for MIMO Visible Light Communication Systems (Communications / MIMO Transmissions)	Focus on maximizing the energy efficiency (EE) of MIMO VLC systems, where the non-negativeness of the transmit signal, the optical and electrical power constraints, and the data rate and bit error rate (BER) requirements are taken into account.
143	TMMAWI02	LEACH Protocol Enhancement for Increasing WSN Lifetime (Wireless Sensor Networks / Protocols)	Wireless Sensor Network (WSN) has become one of the most common techniques in different applications such as agriculture, factory monitoring, health care and fire track. Hence, a new approach to achieve better enhancement of WSN in terms of network lifetime and data transmission time represented by reducing the packet delay time.
144	TMPGWI07	LEACH Protocol Enhancement for Increasing WSN Lifetime (Wireless Sensor Networks / Protocols)	Wireless Sensor Network (WSN) has become one of the most common techniques in different applications such as agriculture, factory monitoring, health care and fire track. Hence, a new approach to

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
			achieve better enhancement of WSN in terms of network lifetime and data transmission time represented by reducing the packet delay time.
145	TMMASP05	ECG Biometric Authentication (Signal Processing / Security Applications)	Since, there are many biometric authentications like a fingerprint, palm print etc. From this study, here we are introducing an ECG based monitoring system for person authentication using deep learning techniques
146	TMMAAI50	Forgery Numeral Handwriting Detection Based on Convolutional Neural Network (Artificial Intelligence / Deep Learning)	Handwriting forgery detection is one of the hot spots in forensic science, and economic cases of handwritten forged numbers are increasing. At the same time, forgery identification of documents is an important piece of evidence in criminal proceedings. Hence, in this process forgery detection is done using deep learning algorithms.
147	TMMAAI68	Deep learning for classification and localization of COVID-19 markers in point-of-care lung ultrasound (Artificial Intelligence / Deep Learning)	This paper studies the application of DL techniques for the analysis of lung ultrasonography (LUS) images for localization and classification.
148	TMPGAI71	Deep learning for classification and localization of COVID-19 markers in point-of-care lung ultrasound (Artificial Intelligence / Deep Learning)	This paper studies the application of DL techniques for the analysis of lung ultrasonography (LUS) images for localization and classification.
149	TMMAIP65	Combining highlight removal and low-light image enhancement technique for HDR-like image generation (Image Processing / Image Enhancement)	In this study, the authors propose a method to obtain an HDR-like image from a single LDR image by removing the specular component from highlight pixels as well as strengthening the actual color.
150	TMPGIP09	Combining highlight removal and low-light image enhancement technique for HDR-like image generation (Image Processing / Image Enhancement)	In this study, the authors propose a method to obtain an HDR-like image from a single LDR image by removing the specular component from highlight pixels as well as strengthening the actual color.
151	TMMAIP66	Contrast Enhancement of Medical Images Using Statistical Methods with Image Processing Concepts (Image Processing / Image Enhancement)	In this study, a simple algorithm is developed, where it utilizes a combination of image processing concepts and statistical methods to enhance the image.
152 ( Page 17 )	TMPGIP10	Contrast Enhancement of Medical Images	In this study, a simple algorithm is <a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a>

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		Using Statistical Methods with Image Processing Concepts (Image Processing / Image Enhancement)	developed, where it utilizes a combination of image processing concepts and statistical methods to enhance the image.
153	TMAPG19	Content-Based Image Retrieval Process for Speech Annotated Digital Images (Image Processing / Image Retrieval)	In this paper, a new indexing and retrieval system for digital pictures has been presented with speech notes based on syllable-converted picture-like samples.
154	TMMAIP67	Content-Based Image Retrieval Process for Speech Annotated Digital Images (Image Processing / Image Retrieval)	In this paper, a new indexing and retrieval system for digital pictures has been presented with speech notes based on syllable-converted picture-like samples.
155	TMPGIP11	Medical Video Watermarking Scheme for Telemedicine Applications (Image Processing / Steganography)	In this study, a new reversible watermarking technique for the security of medical videos is proposed.
156	TMMAIP68	Medical Video Watermarking Scheme for Telemedicine Applications (Image Processing / Security Applications)	In this study, a new reversible watermarking technique for the security of medical videos is proposed.
157	TMMAIP69	Color Correction Based on CFA and Enhancement Based on Retinex with Dense Pixels for Underwater Images (Image Processing / Image Enhancement)	This paper presents a novel color correction method based on color filter array (CFA) and an enhancement method based on Retinex with dense pixels and adaptive linear histogram transformation for degraded color-biased underwater images.
158	TMPGIP12	Color Correction Based on CFA and Enhancement Based on Retinex with Dense Pixels for Underwater Images (Image Processing / Image Enhancement)	This paper presents a novel color correction method based on color filter array (CFA) and an enhancement method based on Retinex with dense pixels and adaptive linear histogram transformation for degraded color-biased underwater images.
159	TMMAWI06	Energy-Efficient Resource Allocation in Wireless Energy Harvesting Sensor Networks (Wireless Sensor Networks / Routing Concepts)	Investigated the energy-efficient resource allocation in WEHSN with constraints on time scheduling parameters and transmission power consumption, where an EH sensor is allowed to transmit its data if the amount of its harvested energy is more than the consumption power.
160 (Page 18)	TMPGWI03	Energy-Efficient Resource Allocation in Wireless Energy Harvesting Sensor Networks	Investigated the energy-efficient resource allocation in WEHSN with

S.No	Project Code	Project Name	Objective
		(Wireless Sensor Networks / Routing Concepts)	constraints on time scheduling parameters and transmission power consumption, where an EH sensor is allowed to transmit its data if the amount of its harvested energy is more than the consumption power.
161	TMMACO23	On Performance of Underwater Wireless Optical Communications Under Turbulence (Communications / MIMO Transmissions)	In this paper, we consider the impact of turbulence on performance of UWOC systems and investigate capacity and bit-error-rate (BER) of underwater wireless optical links under weak and strong turbulence by deriving the expressions of average capacity and BER.
162	TMPGCO15	On Performance of Underwater Wireless Optical Communications Under Turbulence (Communications / MIMO Transmissions)	In this paper, we consider the impact of turbulence on performance of UWOC systems and investigate capacity and bit-error-rate (BER) of underwater wireless optical links under weak and strong turbulence by deriving the expressions of average capacity and BER.
163	TMMAAI78	Parkinson's Disease Classification Using Deep Learning Techniques. (Artificial Intelligence / Deep Learning)	Classifying the nervous disorder disease like Parkinson using Deep Learning Techniques like Convolutional Neural Networks (CNN)
164	TMMAIP373	RGB Image Compression Using Discrete Cosine Transform Algorithm (Image Processing / Image Compression)	This study computes the two-dimensional DCT of 8-by-8 blocks in an input image, dismisses all but 10 of the DCT coefficients in each block, and afterwards reconstructs the image using the two-dimensional inverse DCT of each block." Transform matrices are used in the computing process.
165	TMMAIP370	Secure image transmission using chaotic enhanced elliptic curve cryptography (Image Processing / Security Applications)	The main objective of the project is to provide security for images using hybrid technique using ECC and Chaotic technique.
166	TMMACO61	Bit Error Rate Analysis of Coded OFDM for Digital Audio Broadcasting System Employing Parallel Concatenated Convolutional Turbo Codes (Communications / Modulation Techniques)	Detecting errors and analyzing of Bit Error Rate for Digital audio broadcasting system, employing coded OFDM using CYCLIC REDUNDANCY CHECKER
167	TMMAAI123	Parkinson's Disease Classification Using Machine Learning Techniques.	The objective of this project is to classifying the nervous disorder

### Matlab-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Artificial Intelligence / Artificial Neural Network)	disease like Parkinson using Machine Learning Techniques like Random forest network.
168	TMMASP06	Digital Watermarking for Protecting Audio Classification Datasets (Signal Processing / Security Applications)	In this study, we investigate the possibility of protecting audio classification datasets used in deep learning by embedding a pattern in the magnitude of the time-frequency representation of a subset of the dataset
169	TMMAAI147	IRIS Recognition Using Machine Learning Techniques (Artificial Intelligence / Artificial Neural Network)	The objective of this paper is Iris Recognition, performed using machine learning algorithm of Random Forest. The Image Processing is performed at the initial stage where segmentation and feature extraction of the given input is performed.
170	TMMACO14	Average Information based Spectrum Sensing for Cognitive Radio (Communications / MIMO Transmissions)	The main objective of this project is to sense the spectrum to detect the presence of primary user and to allocate the secondary user. This process increase the probability of detection and decreases the probability of false alarm.
171	TMRECO19_13	Average Information based Spectrum Sensing for Cognitive Radio (Communications / MIMO Transmissions)	The main objective of this project is to sense the spectrum to detect the presence of primary user and to allocate the secondary user. This process increase the probability of detection and decreases the probability of false alarm.
172	TMMASP40	FEATURE EXTRACTION FOR SPEECH RECOGNITION (Signal Processing / Security Applications)	

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
1	TVPGTO860	A 0.7-V 0.6-?W 100-kS s Low-Power SAR ADC With Statistical Estimation-Based Noise Reduction (Tools / Tanner EDA)	In this project we are going to implement the proposed SAR ADC architecture in order reduce the noise and improve the SNR by using the noisy low-power comparator.
2	TVPGTO861	A 0.7-V 0.6-?W 100-kS s Low-Power SAR ADC With Statistical Estimation-Based Noise Reduction (Tools / Cadence EDA)	In this project we are going to implement the proposed SAR ADC architecture in order reduce the noise and improve the SNR by using the noisy low-power comparator.
3	TVMABE183	A 10T, 0.22fJ Bit Search Mixed-VT Pseudo Precharge Free Content Addressable Memory (Back End Domains / Transistor Logic)	In this project we are going to implement the Schematic of the proposed 10T pseudo precharge-free CAM cell to achieve the low leakage and enhancing the robust ness of proposed design.
4	TVMATO1028	A 10T, 0.22fJ Bit Search Mixed-VT Pseudo Precharge Free Content Addressable Memory (Tools / Tanner EDA)	In this project we are going to implement the Schematic of the proposed 10T pseudo precharge-free CAM cell to achieve the low leakage and enhancing the robust ness of proposed design.
5	TVMATO1029	A 10T, 0.22fJ Bit Search Mixed-VT Pseudo Precharge Free Content Addressable Memory (Tools / Cadence EDA)	In this project we are going to implement the Schematic of the proposed 10T pseudo precharge-free CAM cell to achieve the low leakage and enhancing the robust ness of proposed design.
6	TVMATO1030	A 10T, 0.22fJ Bit Search Mixed-VT Pseudo Precharge Free Content Addressable Memory (Tools / LT-Spice)	In this project we are going to implement the Schematic of the proposed 10T pseudo precharge-free CAM cell to achieve the low leakage and enhancing the robust ness of proposed design.
7	TVPGTO858	A 10T, 0.22fJ Bit Search Mixed-VT Pseudo Precharge Free Content Addressable Memory (Tools / Tanner EDA)	In this project we are going to implement the Schematic of the proposed 10T pseudo precharge-free CAM cell to achieve the low leakage and enhancing the robust ness of proposed design.
8	TVPGTO859	A 10T, 0.22fJ Bit Search Mixed-VT Pseudo Precharge Free Content Addressable Memory (Tools / Cadence EDA)	In this project we are going to implement the Schematic of the proposed 10T pseudo precharge-free CAM cell to achieve the low leakage and enhancing the robust ness of proposed design.
(Page 1)	TVMABE182	Two-Stage OTA with All Subthreshold	In this paper, a two stage project.



### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
		MOSFETs and Optimum GBW to DC-Current Ratio (Back End Domains / Transistor Logic)	cascaded Operational Transconductance Amplifier (OTA) is proposed. This Amplifier is operated under sub-threshold values of MOSFETS. This configuration of Amplifier reduces power consumption.
10	TVMATO1025	Two-Stage OTA with All Subthreshold MOSFETs and Optimum GBW to DC-Current Ratio (Tools / Tanner EDA)	In this paper, a two stage folded cascaded Operational Transconductance Amplifier (OTA) is proposed. This Amplifier is operated under sub-threshold values of MOSFETS. This configuration of Amplifier reduces power consumption.
11	TVMATO1026	Two-Stage OTA with All Subthreshold MOSFETs and Optimum GBW to DC-Current Ratio (Tools / Cadence EDA)	In this paper, a two stage folded cascaded Operational Transconductance Amplifier (OTA) is proposed. This Amplifier is operated under sub-threshold values of MOSFETS. This configuration of Amplifier reduces power consumption.
12	TVMATO1027	Two-Stage OTA with All Subthreshold MOSFETs and Optimum GBW to DC-Current Ratio (Tools / LT-Spice)	In this paper, a two stage folded cascaded Operational Transconductance Amplifier (OTA) is proposed. This Amplifier is operated under sub-threshold values of MOSFETS. This configuration of Amplifier reduces power consumption.
13	TVPGTO856	Two-Stage OTA with All Subthreshold MOSFETs and Optimum GBW to DC-Current Ratio (Tools / Tanner EDA)	In this paper, a two stage folded cascaded Operational Transconductance Amplifier (OTA) is proposed. This Amplifier is operated under sub-threshold values of MOSFETS. This configuration of Amplifier reduces power consumption.
14	TVPGTO857	Two-Stage OTA with All Subthreshold MOSFETs and Optimum GBW to DC-Current Ratio (Tools / Cadence EDA)	In this paper, a two stage folded cascaded Operational Transconductance Amplifier (OTA) is proposed. This Amplifier is operated under sub-threshold values of MOSFETS. This configuration of Amplifier reduces power consumption.
15	TVMABE181	Low Power 3-Bit Encoder Design using Memristor (Back End Domains / Core Memories)	In this paper, 3-bit encoder using memristors is proposed. And this architecture is also compared with

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
			3-bit encoder using CMOS and PSEUDO NMOS Logic.
16	TVMATO1022	Low Power 3-Bit Encoder Design using Memristor (Tools / Tanner EDA)	In this paper, 3-bit encoder using memristors is proposed. And this architecture is also compared with 3-bit encoder using CMOS and PSEUDO NMOS Logic.
17	TVMATO1023	Low Power 3-Bit Encoder Design using Memristor (Tools / Cadence EDA)	In this paper, 3-bit encoder using memristors is proposed. And this architecture is also compared with 3-bit encoder using CMOS and PSEUDO NMOS Logic.
18	TVMATO1024	Low Power 3-Bit Encoder Design using Memristor (Tools / LT-Spice)	In this paper, 3-bit encoder using memristors is proposed. And this architecture is also compared with 3-bit encoder using CMOS and PSEUDO NMOS Logic.
19	TVPGTO854	Low Power 3-Bit Encoder Design using Memristor (Tools / Tanner EDA)	In this paper, 3-bit encoder using memristors is proposed. And this architecture is also compared with 3-bit encoder using CMOS and PSEUDO NMOS Logic.
20	TVPGTO855	Low Power 3-Bit Encoder Design using Memristor (Tools / Cadence EDA)	In this paper, 3-bit encoder using memristors is proposed. And this architecture is also compared with 3-bit encoder using CMOS and PSEUDO NMOS Logic.
21	TVMABE180	A Three-Stage Amplifier with Cascode Miller Compensation and Buffered Asymmetric Dual Path for Driving Large Capacitive Loads (Back End Domains / Low Power VLSI)	The main objective of this paper is to develop three stage amplifier using Miller compensation in order to reduce power consumption.
22	TVMATO1019	A Three-Stage Amplifier with Cascode Miller Compensation and Buffered Asymmetric Dual Path for Driving Large Capacitive Loads (Tools / Tanner EDA)	The main objective of this paper is to develop three stage amplifier using Miller compensation in order to reduce power consumption.
23	TVMATO1020	A Three-Stage Amplifier with Cascode Miller Compensation and Buffered Asymmetric Dual Path for Driving Large Capacitive Loads (Tools / Cadence EDA)	The main objective of this paper is to develop three stage amplifier using Miller compensation in order to reduce power consumption.
24	TVMATO1021	A Three-Stage Amplifier with Cascode Miller Compensation and Buffered Asymmetric Dual Path for Driving Large Capacitive Loads (Tools / LT-Spice)	The main objective of this paper is to develop three stage amplifier using Miller compensation in order to reduce power consumption.
25	TVPGTO852	A Three-Stage Amplifier with Cascode Miller Compensation and Buffered Asymmetric Dual Path for Driving Large Capacitive Loads	The main objective of this paper is to develop three stage amplifier using Miller compensation in order

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Tools / Tanner EDA)	to reduce power consumption.
26	TVPGTO853	A Three-Stage Amplifier with Cascode Miller Compensation and Buffered Asymmetric Dual Path for Driving Large Capacitive Loads (Tools / Cadence EDA)	The main objective of this paper is to develop three stage amplifier using Miller compensation in order to reduce power consumption.
27	TVMABE179	A Reliable Low Standby Power 10T SRAM Cell with Expanded Static Noise Margins (Back End Domains / Core Memories)	The main objective of this paper is to implement LP10TSRAM in order to achieve lesser power dissipation.
28	TVMATO1016	A Reliable Low Standby Power 10T SRAM Cell with Expanded Static Noise Margins (Tools / Tanner EDA)	The main objective of this paper is to implement LP10TSRAM in order to achieve lesser power dissipation.
29	TVMATO1017	A Reliable Low Standby Power 10T SRAM Cell with Expanded Static Noise Margins (Tools / Cadence EDA)	The main objective of this paper is to implement LP10TSRAM in order to achieve lesser power dissipation.
30	TVMATO1018	A Reliable Low Standby Power 10T SRAM Cell with Expanded Static Noise Margins (Tools / LT-Spice)	The main objective of this paper is to implement LP10TSRAM in order to achieve lesser power dissipation.
31	TVPGTO850	A Reliable Low Standby Power 10T SRAM Cell with Expanded Static Noise Margins (Tools / Tanner EDA)	The main objective of this paper is to implement LP10TSRAM in order to achieve lesser power dissipation.
32	TVPGTO851	A Reliable Low Standby Power 10T SRAM Cell with Expanded Static Noise Margins (Tools / Cadence EDA)	The main objective of this paper is to implement LP10TSRAM in order to achieve lesser power dissipation.
33	TVMABE178	A High-Efficiency Fast-Transient LDO with Low-Impedance Transient-Current Enhanced Buffer (Back End Domains / Transistor Logic)	The main objective of this paper is to implement Low Dropout Regulator by employing novel buffer. The buffer designed is of low-impedance transient-current enhanced buffer.
34	TVMATO1013	A High-Efficiency Fast-Transient LDO with Low-Impedance Transient-Current Enhanced Buffer (Tools / Tanner EDA)	The main objective of this paper is to implement Low Dropout Regulator by employing novel buffer. The buffer designed is of low-impedance transient-current enhanced buffer.
35	TVMATO1014	A High-Efficiency Fast-Transient LDO with Low-Impedance Transient-Current Enhanced Buffer (Tools / Cadence EDA)	The main objective of this paper is to implement Low Dropout Regulator by employing novel buffer. The buffer designed is of low-impedance transient-current enhanced buffer.
36	TVMATO1015	A High-Efficiency Fast-Transient LDO with Low-Impedance Transient-Current Enhanced Buffer (Tools / LT-Spice)	The main objective of this paper is to implement Low Dropout Regulator by employing novel buffer. The buffer designed is of low-impedance transient-current

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
			enhanced buffer.
37	TVPGTO848	A High-Efficiency Fast-Transient LDO with Low-Impedance Transient-Current Enhanced Buffer (Tools / Tanner EDA)	The main objective of this paper is to implement Low Dropout Regulator by employing novel buffer. The buffer designed is of low-impedance transient-current enhanced buffer.
38	TVPGTO849	A High-Efficiency Fast-Transient LDO with Low-Impedance Transient-Current Enhanced Buffer (Tools / Cadence EDA)	The main objective of this paper is to implement Low Dropout Regulator by employing novel buffer. The buffer designed is of low-impedance transient-current enhanced buffer.
39	TVMABE177	A High CMRR Instrumentation Amplifier Employing Pseudo-Differential Inverter for Neural Signal Sensing (Back End Domains / Transistor Logic)	The main objective of this paper is to design efficient Instrumentation Amplifier in terms of Area and power consumption. The designs of IA is built using Psuedo differential logic and also single ended topology.
40	TVMATO1010	A High CMRR Instrumentation Amplifier Employing Pseudo-Differential Inverter for Neural Signal Sensing (Tools / Tanner EDA)	The main objective of this paper is to design efficient Instrumentation Amplifier in terms of Area and power consumption. The designs of IA is built using Psuedo differential logic and also single ended topology.
41	TVMATO1011	A High CMRR Instrumentation Amplifier Employing Pseudo-Differential Inverter for Neural Signal Sensing (Tools / Cadence EDA)	The main objective of this paper is to design efficient Instrumentation Amplifier in terms of Area and power consumption. The designs of IA is built using Psuedo differential logic and also single ended topology.
42	TVMATO1012	A High CMRR Instrumentation Amplifier Employing Pseudo-Differential Inverter for Neural Signal Sensing (Tools / LT-Spice)	The main objective of this paper is to design efficient Instrumentation Amplifier in terms of Area and power consumption. The designs of IA is built using Psuedo differential logic and also single ended topology.
43	TVPGTO846	A High CMRR Instrumentation Amplifier Employing Pseudo-Differential Inverter for Neural Signal Sensing (Tools / Tanner EDA)	The main objective of this paper is to design efficient Instrumentation Amplifier in terms of Area and power consumption. The designs of IA is built using Psuedo differential logic and also single ended topology.
44	TVPGTO847	A High CMRR Instrumentation Amplifier Employing Pseudo-Differential Inverter for Neural Signal Sensing (Tools / Cadence EDA)	The main objective of this paper is to design efficient Instrumentation Amplifier in terms of Area and power consumption. The designs of IA is built using Psuedo differential logic

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S.No	Project Code	Project Name	Objective
			and also single ended topology.
45	TVMABE175	Design and optimization of MIMO filter using current conveyor (Back End Domains / Transistor Logic)	In this project we are going to implement the circuit functions represent low pass filter (LPF), high pass filter (HPF) and band pass filter (BPF) function while taking different input and output port combinations.
46	TVMATO1004	Design and optimization of MIMO filter using current conveyor (Tools / Tanner EDA)	In this project we are going to implement the circuit functions represent low pass filter (LPF), high pass filter (HPF) and band pass filter (BPF) function while taking different input and output port combinations.
47	TVMATO1005	Design and optimization of MIMO filter using current conveyor (Tools / Cadence EDA)	In this project we are going to implement the circuit functions represent low pass filter (LPF), high pass filter (HPF) and band pass filter (BPF) function while taking different input and output port combinations.
48	TVMATO1006	Design and optimization of MIMO filter using current conveyor (Tools / LT-Spice)	In this project we are going to implement the circuit functions represent low pass filter (LPF), high pass filter (HPF) and band pass filter (BPF) function while taking different input and output port combinations.
49	TVPGTO842	Design and optimization of MIMO filter using current conveyor (Tools / Tanner EDA)	In this project we are going to implement the circuit functions represent low pass filter (LPF), high pass filter (HPF) and band pass filter (BPF) function while taking different input and output port combinations.
50	TVPGTO843	Design and optimization of MIMO filter using current conveyor (Tools / Cadence EDA)	In this project we are going to implement the circuit functions represent low pass filter (LPF), high pass filter (HPF) and band pass filter (BPF) function while taking different input and output port combinations.
51	TVMABE173	Design of Three Stage Dynamic Comparator with Tail Transistor using 20nm FinFET Technology for ADCs (Back End Domains / Transistor Logic)	The proposed design of Modified three stage comparator by using the tail transistor has been implemented to achieve the lower leakage power consumption and reducing the short channel effects.

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S.No	Project Code	Project Name	Objective
52	TVMATO999	Design of Three Stage Dynamic Comparator with Tail Transistor using 20nm FinFET Technology for ADCs (Tools / Tanner EDA)	The proposed design of Modified three stage comparator by using the tail transistor has been implemented to achieve the lower leakage power consumption and reducing the short channel effects.
53	TVMATO1000	Design of Three Stage Dynamic Comparator with Tail Transistor using 20nm FinFET Technology for ADCs (Tools / LT-Spice)	The proposed design of Modified three stage comparator by using the tail transistor has been implemented to achieve the lower leakage power consumption and reducing the short channel effects.
54	TVPGTO838	Design of Three Stage Dynamic Comparator with Tail Transistor using 20nm FinFET Technology for ADCs (Tools / Tanner EDA)	The proposed design of Modified three stage comparator by using the tail transistor has been implemented to achieve the lower leakage power consumption and reducing the short channel effects.
55	TVPGTO839	Design of Three Stage Dynamic Comparator with Tail Transistor using 20nm FinFET Technology for ADCs (Tools / Cadence EDA)	The proposed design of Modified three stage comparator by using the tail transistor has been implemented to achieve the lower leakage power consumption and reducing the short channel effects.
56	TVMAFE504	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Front End Domains / DSP Core)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
57	TVMATO998	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx ISE)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
58	TVPGTO836	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx Vivado)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
59	TVPGTO837	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx ISE)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.



### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
60	TVMAFE503	Novel VLSI Architecture for Fractional-Order Correntropy Adaptive Filtering Algorithm (Front End Domains / DSP Core)	In this a hardware implementation of Adaptive filter with fractional order and making use of maximum correntropy criteria to get better performance and after that applying pipelining to the hardware implementation to design a delayed fractional order adaptive filter to enhance the performance of symmetric ? stable signals.
61	TVMATO995	Novel VLSI Architecture for Fractional-Order Correntropy Adaptive Filtering Algorithm (Tools / Xilinx Vivado)	In this a hardware implementation of Adaptive filter with fractional order and making use of maximum correntropy criteria to get better performance and after that applying pipelining to the hardware implementation to design a delayed fractional order adaptive filter to enhance the performance of symmetric ? stable signals.
62	TVMATO996	Novel VLSI Architecture for Fractional-Order Correntropy Adaptive Filtering Algorithm (Tools / Xilinx ISE)	In this a hardware implementation of Adaptive filter with fractional order and making use of maximum correntropy criteria to get better performance and after that applying pipelining to the hardware implementation to design a delayed fractional order adaptive filter to enhance the performance of symmetric ? stable signals.
63	TVPGTO834	Novel VLSI Architecture for Fractional-Order Correntropy Adaptive Filtering Algorithm (Tools / Xilinx Vivado)	In this a hardware implementation of Adaptive filter with fractional order and making use of maximum correntropy criteria to get better performance and after that applying pipelining to the hardware implementation to design a delayed fractional order adaptive filter to enhance the performance of symmetric ? stable signals.
64	TVPGTO835	Novel VLSI Architecture for Fractional-Order Correntropy Adaptive Filtering Algorithm (Tools / Xilinx ISE)	In this a hardware implementation of Adaptive filter with fractional order and making use of maximum correntropy criteria to get better performance and after that applying pipelining to the hardware implementation to design a delayed fractional order adaptive filter to enhance the performance of symmetric ? stable signals.
( Page 8 ) 65	TVMAFE502	CRC-Based Correction of Multiple Errors Using	<p>Email: <a href="mailto:info@takeoffprojects.com">info@takeoffprojects.com</a></p> <p>In this project, a multiple bit error</p>

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
		an Optimized Lookup Table (Front End Domains / Communications)	correction design algorithm was proposed using cyclic redundancy check syndrome and by utilizing optimized look up table which can avoid few operations and can enhance the performance of the error correction design.
66	TVMATO993	CRC-Based Correction of Multiple Errors Using an Optimized Lookup Table (Tools / Xilinx Vivado)	In this project, a multiple bit error correction design algorithm was proposed using cyclic redundancy check syndrome and by utilizing optimized look up table which can avoid few operations and can enhance the performance of the error correction design.
67	TVMATO994	CRC-Based Correction of Multiple Errors Using an Optimized Lookup Table (Tools / Xilinx ISE)	In this project, a multiple bit error correction design algorithm was proposed using cyclic redundancy check syndrome and by utilizing optimized look up table which can avoid few operations and can enhance the performance of the error correction design.
68	TVPGTO832	CRC-Based Correction of Multiple Errors Using an Optimized Lookup Table (Tools / Xilinx Vivado)	In this project, a multiple bit error correction design algorithm was proposed using cyclic redundancy check syndrome and by utilizing optimized look up table which can avoid few operations and can enhance the performance of the error correction design.
69	TVPGTO833	CRC-Based Correction of Multiple Errors Using an Optimized Lookup Table (Tools / Xilinx ISE)	In this project, a multiple bit error correction design algorithm was proposed using cyclic redundancy check syndrome and by utilizing optimized look up table which can avoid few operations and can enhance the performance of the error correction design.
70	TVMAFE501	Effective Hardware Accelerator for 2D DCT IDCT Using Improved Loeffler Architecture (Front End Domains / DSP Core)	In this implementation, a DCT/IDCT hardware architecture using loeffler algorithm with multiplier less DCT was proposed. To implement multiplier less DCT, CDS encoding was implemented and thereby the efficiency of the design of DCT has been optimized.
71	TVMATO991	Effective Hardware Accelerator for 2D DCT IDCT Using Improved Loeffler Architecture (Tools / Xilinx Vivado)	In this implementation, a DCT/IDCT hardware architecture using loeffler algorithm with multiplier less DCT

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
			was proposed. To implement multiplier less DCT, CDS encoding was implemented and thereby the efficiency of the design of DCT has been optimized.
72	TVMATO992	Effective Hardware Accelerator for 2D DCT IDCT Using Improved Loeffler Architecture (Tools / Xilinx ISE)	In this implementation, a DCT/IDCT hardware architecture using loeffler algorithm with multiplier les DCT was proposed. To implement multiplier less DCT, CDS encoding was implemented and thereby the efficiency of the design of DCT has been optimized.
73	TVPGTO830	Effective Hardware Accelerator for 2D DCT IDCT Using Improved Loeffler Architecture (Tools / Xilinx Vivado)	In this implementation, a DCT/IDCT hardware architecture using loeffler algorithm with multiplier les DCT was proposed. To implement multiplier less DCT, CDS encoding was implemented and thereby the efficiency of the design of DCT has been optimized.
74	TVPGTO831	Effective Hardware Accelerator for 2D DCT IDCT Using Improved Loeffler Architecture (Tools / Xilinx ISE)	In this implementation, a DCT/IDCT hardware architecture using loeffler algorithm with multiplier les DCT was proposed. To implement multiplier less DCT, CDS encoding was implemented and thereby the efficiency of the design of DCT has been optimized.
75	TVMAFE500	Design of Approximate Radix-256 Booth Encoding for Error-Tolerant Computing (Front End Domains / Arithmetic Core)	This an approximate multiplier with Radix-256 booth based encoding has been suggested. In order to evaluate the booth encoding based on radix-256 a 16 bit approximate multiplier was designed and implemented.
76	TVMATO989	Design of Approximate Radix-256 Booth Encoding for Error-Tolerant Computing (Tools / Xilinx Vivado)	This an approximate multiplier with Radix-256 booth based encoding has been suggested. In order to evaluate the booth encoding based on radix-256 a 16 bit approximate multiplier was designed and implemented.
77	TVMATO990	Design of Approximate Radix-256 Booth Encoding for Error-Tolerant Computing (Tools / Xilinx ISE)	This an approximate multiplier with Radix-256 booth based encoding has been suggested. In order to evaluate the booth encoding based on radix-256 a 16 bit approximate multiplier was designed and implemented.

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S.No	Project Code	Project Name	Objective
78	TVPGTO828	Design of Approximate Radix-256 Booth Encoding for Error-Tolerant Computing (Tools / Xilinx Vivado)	This an approximate multiplier with Radix-256 booth based encoding has been suggested. In order to evaluate the booth encoding based on radix-256 a 16 bit approximate multiplier was designed and implemented.
79	TVPGTO829	Design of Approximate Radix-256 Booth Encoding for Error-Tolerant Computing (Tools / Xilinx ISE)	This an approximate multiplier with Radix-256 booth based encoding has been suggested. In order to evaluate the booth encoding based on radix-256 a 16 bit approximate multiplier was designed and implemented.
80	TVMAFE499	FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System with Transcendental Nonlinearities (Front End Domains / DSP Core)	In this project a reconfigurable CORDIC hardware approach is designed with two approaches of single multiplier and multiplier approach. Here these two are compared both have its own advantages and these are designed for the purpose of memristive chaotic system.
81	TVMATO987	FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System with Transcendental Nonlinearities (Tools / Xilinx Vivado)	In this project a reconfigurable CORDIC hardware approach is designed with two approaches of single multiplier and multiplier approach. Here these two are compared both have its own advantages and these are designed for the purpose of memristive chaotic system.
82	TVMATO988	FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System with Transcendental Nonlinearities (Tools / Xilinx ISE)	In this project a reconfigurable CORDIC hardware approach is designed with two approaches of single multiplier and multiplier approach. Here these two are compared both have its own advantages and these are designed for the purpose of memristive chaotic system.
83	TVPGTO826	FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System with Transcendental Nonlinearities (Tools / Xilinx Vivado)	In this project a reconfigurable CORDIC hardware approach is designed with two approaches of single multiplier and multiplier approach. Here these two are compared both have its own advantages and these are designed for the purpose of memristive chaotic system.

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S.No	Project Code	Project Name	Objective
84	TVPGTO827	FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System with Transcendental Nonlinearities (Tools / Xilinx ISE)	In this project a reconfigurable CORDIC hardware approach is designed with two approaches of single multiplier and multiplier approach. Here these two are compared both have its own advantages and these are designed for the purpose of memristive chaotic system.
85	TVMAFE498	A Secure method for Image Signaturing using SHA 256, RSA, and Advanced Encryption Standard (AES) (Front End Domains / Communications)	The core idea of this paper is to confirm whether the given image is original or manipulated one. Even though a single pixel varied means it will identify. This will identify using the 3 different algorithms SHA, RSA, AES.
86	TVMATO985	A Secure method for Image Signaturing using SHA 256, RSA, and Advanced Encryption Standard (AES) (Tools / Xilinx Vivado)	The core idea of this paper is to confirm whether the given image is original or manipulated one. Even though a single pixel varied means it will identify. This will identify using the 3 different algorithms SHA, RSA, AES.
87	TVMATO986	A Secure method for Image Signaturing using SHA 256, RSA, and Advanced Encryption Standard (AES) (Tools / Xilinx ISE)	The core idea of this paper is to confirm whether the given image is original or manipulated one. Even though a single pixel varied means it will identify. This will identify using the 3 different algorithms SHA, RSA, AES.
88	TVPGTO824	A Secure method for Image Signaturing using SHA 256, RSA, and Advanced Encryption Standard (AES) (Tools / Xilinx Vivado)	The core idea of this paper is to confirm whether the given image is original or manipulated one. Even though a single pixel varied means it will identify. This will identify using the 3 different algorithms SHA, RSA, AES.
89	TVPGTO825	A Secure method for Image Signaturing using SHA 256, RSA, and Advanced Encryption Standard (AES) (Tools / Xilinx ISE)	The core idea of this paper is to confirm whether the given image is original or manipulated one. Even though a single pixel varied means it will identify. This will identify using the 3 different algorithms SHA, RSA, AES.
90	TVMAFE497	TROT: A Three-Edge Ring Oscillator Based True Random Number Generator with Time-to-Digital Conversion (Front End Domains / Communications)	The main aim of this paper is to generate the true random numbers through 3 edge ring oscillators to increase the hardware security as well as increase the randomness of the output.

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
91	TVMATO983	TROT: A Three-Edge Ring Oscillator Based True Random Number Generator with Time-to-Digital Conversion (Tools / Xilinx Vivado)	The main aim of this paper is to generate the true random numbers through 3 edge ring oscillators to increase the hardware security as well as increase the randomness of the output.
92	TVMATO984	TROT: A Three-Edge Ring Oscillator Based True Random Number Generator with Time-to-Digital Conversion (Tools / Xilinx ISE)	The main aim of this paper is to generate the true random numbers through 3 edge ring oscillators to increase the hardware security as well as increase the randomness of the output.
93	TVPGTO822	TROT: A Three-Edge Ring Oscillator Based True Random Number Generator with Time-to-Digital Conversion (Tools / Xilinx Vivado)	The main aim of this paper is to generate the true random numbers through 3 edge ring oscillators to increase the hardware security as well as increase the randomness of the output.
94	TVPGTO823	TROT: A Three-Edge Ring Oscillator Based True Random Number Generator with Time-to-Digital Conversion (Tools / Xilinx ISE)	The main aim of this paper is to generate the true random numbers through 3 edge ring oscillators to increase the hardware security as well as increase the randomness of the output.
95	TVMAFE496	A High-Throughput VLSI Architecture Design of Canonical Huffman Encoder (Front End Domains / Communications)	The idea of this paper is to reduce the time complexity over the existing standard Huffman encoder. This will be achieved using the splitting tree technique. High compression ratio is added advantage of CHN.
96	TVMATO981	A High-Throughput VLSI Architecture Design of Canonical Huffman Encoder (Tools / Xilinx Vivado)	The idea of this paper is to reduce the time complexity over the existing standard Huffman encoder. This will be achieved using the splitting tree technique. High compression ratio is added advantage of CHN.
97	TVMATO982	A High-Throughput VLSI Architecture Design of Canonical Huffman Encoder (Tools / Xilinx ISE)	The idea of this paper is to reduce the time complexity over the existing standard Huffman encoder. This will be achieved using the splitting tree technique. High compression ratio is added advantage of CHN.
98	TVPGTO820	A High-Throughput VLSI Architecture Design of Canonical Huffman Encoder (Tools / Xilinx Vivado)	The idea of this paper is to reduce the time complexity over the existing standard Huffman encoder. This will be achieved using the splitting tree technique. High compression ratio is added advantage of CHN.



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S.No	Project Code	Project Name	Objective
99	TVPGTO821	A High-Throughput VLSI Architecture Design of Canonical Huffman Encoder (Tools / Xilinx ISE)	The idea of this paper is to reduce the time complexity over the existing standard Huffman encoder. This will be achieved using the splitting tree technique. High compression ratio is added advantage of CHN.
100	TVMAFE495	A Novel Ultra-Compact FPGA-Compatible TRNG Architecture Exploiting Latched Ring Oscillators (Front End Domains / Communications)	The main aim of this paper is to generate the true random numbers with less FPGA resources. It will be applicable when we introduce the LRO. The randomness and metastability reduction are the added advantages.
101	TVMATO979	A Novel Ultra-Compact FPGA-Compatible TRNG Architecture Exploiting Latched Ring Oscillators (Tools / Xilinx Vivado)	The main aim of this paper is to generate the true random numbers with less FPGA resources. It will be applicable when we introduce the LRO. The randomness and metastability reduction are the added advantages.
102	TVMATO980	A Novel Ultra-Compact FPGA-Compatible TRNG Architecture Exploiting Latched Ring Oscillators (Tools / Xilinx ISE)	The main aim of this paper is to generate the true random numbers with less FPGA resources. It will be applicable when we introduce the LRO. The randomness and metastability reduction are the added advantages.
103	TVPGTO818	A Novel Ultra-Compact FPGA-Compatible TRNG Architecture Exploiting Latched Ring Oscillators (Tools / Xilinx Vivado)	The main aim of this paper is to generate the true random numbers with less FPGA resources. It will be applicable when we introduce the LRO. The randomness and metastability reduction are the added advantages.
104	TVPGTO819	A Novel Ultra-Compact FPGA-Compatible TRNG Architecture Exploiting Latched Ring Oscillators (Tools / Xilinx ISE)	The main aim of this paper is to generate the true random numbers with less FPGA resources. It will be applicable when we introduce the LRO. The randomness and metastability reduction are the added advantages.
105	TVMAFE494	An Optimized M-Term Karatsuba-Like Binary Polynomial Multiplier for Finite Field Arithmetic (Front End Domains / Arithmetic Core)	The main aim of this project is to reduce the area complexity of multiplier over the delay. This will be applicable when the design needs finite number of inputs and outputs in operation.
106	TVMATO977	An Optimized M-Term Karatsuba-Like Binary Polynomial Multiplier for Finite Field Arithmetic	The main aim of this project is to reduce the area complexity of

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S.No	Project Code	Project Name	Objective
		(Tools / Xilinx Vivado)	multiplier over the delay. This will be applicable when the design needs finite number of inputs and outputs in operation.
107	TVMATO978	An Optimized M-Term Karatsuba-Like Binary Polynomial Multiplier for Finite Field Arithmetic (Tools / Xilinx ISE)	The main aim of this project is to reduce the area complexity of multiplier over the delay. This will be applicable when the design needs finite number of inputs and outputs in operation.
108	TVPGTO816	An Optimized M-Term Karatsuba-Like Binary Polynomial Multiplier for Finite Field Arithmetic (Tools / Xilinx Vivado)	The main aim of this project is to reduce the area complexity of multiplier over the delay. This will be applicable when the design needs finite number of inputs and outputs in operation.
109	TVPGTO817	An Optimized M-Term Karatsuba-Like Binary Polynomial Multiplier for Finite Field Arithmetic (Tools / Xilinx ISE)	The main aim of this project is to reduce the area complexity of multiplier over the delay. This will be applicable when the design needs finite number of inputs and outputs in operation.
110	TVMAFE493	A Highly Secure FPGA-Based Dual-Hiding Asynchronous-Logic AES Accelerator against Side-Channel Attacks (Front End Domains / Communications)	The main objective of this paper is to secure the data from side channel attacks by utilizing the Async-logic AES with less area and low energy. The dual rail hiding is used in vertical SCA and ZV compensate S-box are employed to hide the horizontal SCA.
111	TVMATO975	A Highly Secure FPGA-Based Dual-Hiding Asynchronous-Logic AES Accelerator against Side-Channel Attacks (Tools / Xilinx Vivado)	The main objective of this paper is to secure the data from side channel attacks by utilizing the Async-logic AES with less area and low energy. The dual rail hiding is used in vertical SCA and ZV compensate S-box are employed to hide the horizontal SCA.
112	TVMATO976	A Highly Secure FPGA-Based Dual-Hiding Asynchronous-Logic AES Accelerator against Side-Channel Attacks (Tools / Xilinx ISE)	The main objective of this paper is to secure the data from side channel attacks by utilizing the Async-logic AES with less area and low energy. The dual rail hiding is used in vertical SCA and ZV compensate S-box are employed to hide the horizontal SCA.
113	TVPGTO814	A Highly Secure FPGA-Based Dual-Hiding Asynchronous-Logic AES Accelerator against Side-Channel Attacks	The main objective of this paper is to secure the data from side channel attacks by utilizing the Async-logic

### VLSI-Latest-Titles

S.No	Project Code	Project Name	Objective
		(Tools / Xilinx Vivado)	AES with less area and low energy. The dual rail hiding is used in vertical SCA and ZV compensate S-box are employed to hide the horizontal SCA.
114	TVPGTO815	A Highly Secure FPGA-Based Dual-Hiding Asynchronous-Logic AES Accelerator against Side-Channel Attacks (Tools / Xilinx ISE)	The main objective of this paper is to secure the data from side channel attacks by utilizing the Async-logic AES with less area and low energy. The dual rail hiding is used in vertical SCA and ZV compensate S-box are employed to hide the horizontal SCA.
115	TVMAFE489	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Front End Domains / Arithmetic Core)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
116	TVMATO969	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx Vivado)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
117	TVMATO970	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx ISE)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
118	TVPGTO808	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx Vivado)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
119	TVPGTO809	A Low-Power and High-Accuracy Approximate Multiplier With Reconfigurable Truncation (Tools / Xilinx ISE)	The main objective of this project is to design an approximate multiplier with high accuracy and dynamically truncate to maintain the required accuracy as per the user and to obtain power optimization.
120	TVMAFE459	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Front End Domains / Arithmetic Core)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.

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S.No	Project Code	Project Name	Objective
121	TVMAFE460	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Front End Domains / DSP Core)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.
122	TVMAFE461	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Front End Domains / Communications)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.
123	TVMATO899	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Tools / Xilinx Vivado)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.
124	TVMATO900	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Tools / Xilinx ISE)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.
125	TVPGTO761	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Tools / Xilinx Vivado)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.
126	TVPGTO762	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors (Tools / Xilinx ISE)	The main objective of this project is to design a floating point division operator based pon signed array so that the number of multipliers and iterations can be minimized.
127	TVMAFE407	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for FPGA Implementation (Front End Domains / Arithmetic Core)	The main aim of this project is to implement the Overlap-Free Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
128	TVMATO801	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for FPGA Implementation (Tools / Xilinx Vivado)	The main aim of this project is to implement the Overlap-Free Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
129	TVMATO802	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for FPGA Implementation (Tools / Xilinx ISE)	The main aim of this project is to implement the Overlap-Free Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
130	TVMATO803	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for	The main aim of this project is to implement the Overlap-Free

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S.No	Project Code	Project Name	Objective
		FGPA Implementation (Tools / Cadence EDA)	Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
131	TVPGTO677	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for FGPA Implementation (Tools / Xilinx Vivado)	The main aim of this project is to implement the Overlap-Free Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
132	TVPGTO678	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for FGPA Implementation (Tools / Xilinx ISE)	The main aim of this project is to implement the Overlap-Free Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
133	TVPGTO679	An Efficient and High-Speed Overlap-Free Karatsuba-Based Finite-Field Multiplier for FGPA Implementation (Tools / Cadence EDA)	The main aim of this project is to implement the Overlap-Free Karatsuba-Based Finite-Field Multiplier with high speed and area efficiency.
134	TVPGTO658	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Tools / FPGA)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective transformation for optimization.
135	TVMATO742	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Tools / Xilinx Vivado)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective transformation for optimization.
136	TVMATO743	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Tools / Xilinx ISE)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective transformation for optimization.
137	TVPGFE310	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Front End Domains / Communications and Crypto Core)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective transformation for optimization.
138	TVPGTO606	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Tools / Xilinx Vivado)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective transformation for optimization.
139	TVPGTO607	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Tools / Xilinx ISE)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective



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S.No	Project Code	Project Name	Objective
			transformation for optimization.
140	TVMAFE374	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization (Front End Domains / Communications)	The main objective of this paper is to improve the security by extending the cipher key size into 256 bit key AES algorithm and applied selective transformation for optimization.
141	TVPGBE135	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Back End Domains / Core Memories)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
142	TVPGTO644	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Tools / Cadence EDA)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
143	TVPGTO645	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Tools / Tanner EDA)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
144	TVMABE135	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Back End Domains / Cadence EDA)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
145	TVMABE136	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Back End Domains / Core Memories)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
146	TVMATO778	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Tools / Tanner EDA)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using



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S.No	Project Code	Project Name	Objective
			this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
147	TVMATO779	Transmission Gate -Based 8T SRAM Cell For Bio Medical Applications (Tools / Cadence EDA)	In this paper, a novel transmission gate based SRAM is designed for biomedical applications. By using this SRAM, the extra circuit required for the read operation can be reduced. Hence the proposed SRAM provides better performance in terms of area and power.
148	TVMABE137	Low Power, High Performance PMOS Biased Sense Amplifier (Back End Domains / Cadence EDA)	In this paper, two proposed circuits of PMOS-biased sense amplifier is implemented. A fast access time and low power dissipation are achieved with newly developed circuits of sense amplifier for low voltage supply.
149	TVMABE138	Low Power, High Performance PMOS Biased Sense Amplifier (Back End Domains / Low Power VLSI)	In this paper, two proposed circuits of PMOS-biased sense amplifier is implemented. A fast access time and low power dissipation are achieved with newly developed circuits of sense amplifier for low voltage supply.
150	TVPGTO646	Low Power, High Performance PMOS Biased Sense Amplifier (Tools / Cadence EDA)	In this paper, two proposed circuits of PMOS-biased sense amplifier is implemented. A fast access time and low power dissipation are achieved with newly developed circuits of sense amplifier for low voltage supply.
151	TVPGTO647	Low Power, High Performance PMOS Biased Sense Amplifier (Tools / Tanner EDA)	In this paper, two proposed circuits of PMOS-biased sense amplifier is implemented. A fast access time and low power dissipation are achieved with newly developed circuits of sense amplifier for low voltage supply.
152	TVPGBE137	Low Power, High Performance PMOS Biased Sense Amplifier (Back End Domains / Low Power VLSI)	In this paper, two proposed circuits of PMOS-biased sense amplifier is implemented. A fast access time and low power dissipation are achieved with newly developed circuits of sense amplifier for low voltage supply.
153 ( Page 20 )	TVMAFE398	Low-Power Multiplexer Structures Targeting	The main aim of this paper is to <a href="mailto:info@takeoffprojects.com">Email: info@takeoffprojects.com</a>

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S.No	Project Code	Project Name	Objective
		Efficient QCA Nanotechnology Circuit Designs (Front End Domains / Arithmetic Core)	implement mux architecture based on QCA in an efficient way and improve the performance of the design.
154	TVPGFE323	Low-Power Multiplexer Structures Targeting Efficient QCA Nanotechnology Circuit Designs (Front End Domains / Arithmetic Core)	The main aim of this paper is to implement mux architecture based on QCA in an efficient way and improve the performance of the design.
155	TVPGFE302	A High-Performance Core Micro-Architecture Based on RISC-V ISA for Low Power Applications (Front End Domains / DSP Core)	The main objective of this paper is to enhance the operation speed with the help of instruction set architecture. The multiplier and dividers are employed to perform both signed and unsigned operations with less area cost
156	TVPGTO589	A High-Performance Core Micro-Architecture Based on RISC-V ISA for Low Power Applications (Tools / Cadence EDA)	The main objective of this paper is to enhance the operation speed with the help of instruction set architecture. The multiplier and dividers are employed to perform both signed and unsigned operations with less area cost
157	TVPGTO590	A High-Performance Core Micro-Architecture Based on RISC-V ISA for Low Power Applications (Tools / Xilinx Vivado)	The main objective of this paper is to enhance the operation speed with the help of instruction set architecture. The multiplier and dividers are employed to perform both signed and unsigned operations with less area cost
158	TVPGTO591	A High-Performance Core Micro-Architecture Based on RISC-V ISA for Low Power Applications (Tools / Xilinx ISE)	The main objective of this paper is to enhance the operation speed with the help of instruction set architecture. The multiplier and dividers are employed to perform both signed and unsigned operations with less area cost
159	TVMAFE378	Constant-time Synchronous Binary Counter with Minimal Clock Period (Front End Domains / Testing)	The main objective of this paper is to reduce fan-out and improve the counting rate, for this we are implementing constant-time synchronous binary counter based on pre-scaling concept.
160	TVMATO728	Constant-time Synchronous Binary Counter with Minimal Clock Period (Tools / Xilinx Vivado)	The main objective of this paper is to reduce fan-out and improve the counting rate, for this we are implementing constant-time synchronous binary counter based on pre-scaling concept.

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S.No	Project Code	Project Name	Objective
161	TVMATO729	Constant-time Synchronous Binary Counter with Minimal Clock Period (Tools / Xilinx ISE)	The main objective of this paper is to reduce fan-out and improve the counting rate, for this we are implementing constant-time synchronous binary counter based on pre-scaling concept.
162	TVPGFE303	Constant-time Synchronous Binary Counter with Minimal Clock Period (Front End Domains / Design for Testability)	The main objective of this paper is to reduce fan-out and improve the counting rate, for this we are implementing constant-time synchronous binary counter based on pre-scaling concept.
163	TVPGTO592	Constant-time Synchronous Binary Counter with Minimal Clock Period (Tools / Xilinx Vivado)	The main objective of this paper is to reduce fan-out and improve the counting rate, for this we are implementing constant-time synchronous binary counter based on pre-scaling concept.
164	TVPGTO593	Constant-time Synchronous Binary Counter with Minimal Clock Period (Tools / Xilinx ISE)	The main objective of this paper is to reduce fan-out and improve the counting rate, for this we are implementing constant-time synchronous binary counter based on pre-scaling concept.
165	TVMAFE383	Fast Binary Counters and Compressors Generated by Sorting Network (Front End Domains / Arithmetic Core)	The main objective of this paper is to implement fast saturated binary counters based on sorting network to improve the efficiency of designs involving summation of multiple operands.
166	TVMATO738	Fast Binary Counters and Compressors Generated by Sorting Network (Tools / Xilinx Vivado)	The main objective of this paper is to implement fast saturated binary counters based on sorting network to improve the efficiency of designs involving summation of multiple operands.
167	TVMATO739	Fast Binary Counters and Compressors Generated by Sorting Network (Tools / Xilinx ISE)	The main objective of this paper is to implement fast saturated binary counters based on sorting network to improve the efficiency of designs involving summation of multiple operands.
168	TVPGFE308	Fast Binary Counters and Compressors Generated by Sorting Network (Front End Domains / Arithmetic Core)	The main objective of this paper is to implement fast saturated binary counters based on sorting network to improve the efficiency of designs involving summation of multiple operands.

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S.No	Project Code	Project Name	Objective
169	TVPGTO602	Fast Binary Counters and Compressors Generated by Sorting Network (Tools / Xilinx Vivado)	The main objective of this paper is to implement fast saturated binary counters based on sorting network to improve the efficiency of designs involving summation of multiple operands.
170	TVPGTO603	Fast Binary Counters and Compressors Generated by Sorting Network (Tools / Xilinx ISE)	The main objective of this paper is to implement fast saturated binary counters based on sorting network to improve the efficiency of designs involving summation of multiple operands.
171	TVMAFE384	Fast Mapping and Updating Algorithms for a Binary CAM on FPGA (Front End Domains / Communications)	The main objective of this paper is to speed up the table makeup and reduce the energy consumption for the mapping and updating algorithms for a binary CAM on FPGA algorithm selects at most one layer of SRAM blocks for contents updating at any location rather than activating the entire memory blocks and ultimately consumes less energy during the update process.
172	TVMATO740	Fast Mapping and Updating Algorithms for a Binary CAM on FPGA (Tools / Xilinx Vivado)	The main objective of this paper is to speed up the table makeup and reduce the energy consumption for the mapping and updating algorithms for a binary CAM on FPGA algorithm selects at most one layer of SRAM blocks for contents updating at any location rather than activating the entire memory blocks and ultimately consumes less energy during the update process.
173	TVMATO741	Fast Mapping and Updating Algorithms for a Binary CAM on FPGA (Tools / Xilinx ISE)	The main objective of this paper is to speed up the table makeup and reduce the energy consumption for the mapping and updating algorithms for a binary CAM on FPGA algorithm selects at most one layer of SRAM blocks for contents updating at any location rather than activating the entire memory blocks and ultimately consumes less energy during the update process.
174	TVPGFE309	Fast Mapping and Updating Algorithms for a Binary CAM on FPGA (Front End Domains / Communications and Crypto Core)	The main objective of this paper is to speed up the table makeup and reduce the energy consumption for the mapping and updating algorithms for a binary CAM on FPGA algorithm selects at most one

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S.No	Project Code	Project Name	Objective
			layer of SRAM blocks for contents updating at any location rather than activating the entire memory blocks and ultimately consumes less energy during the update process.
175	TVPGTO604	Fast Mapping and Updating Algorithms for a Binary CAM on FPGA (Tools / Xilinx Vivado)	The main objective of this paper is to speed up the table makeup and reduce the energy consumption for the mapping and updating algorithms for a binary CAM on FPGA algorithm selects at most one layer of SRAM blocks for contents updating at any location rather than activating the entire memory blocks and ultimately consumes less energy during the update process.
176	TVPGTO605	Fast Mapping and Updating Algorithms for a Binary CAM on FPGA (Tools / Xilinx ISE)	The main objective of this paper is to speed up the table makeup and reduce the energy consumption for the mapping and updating algorithms for a binary CAM on FPGA algorithm selects at most one layer of SRAM blocks for contents updating at any location rather than activating the entire memory blocks and ultimately consumes less energy during the update process.
177	TVMABE119	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Back End Domains / Transistor Logic)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
178	TVMABE120	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Back End Domains / Low Power VLSI)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
179	TVMATO716	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Tools / Tanner EDA)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.

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S.No	Project Code	Project Name	Objective
180	TVMATO717	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Tools / Cadence EDA)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
181	TVPGBE115	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Back End Domains / Transistor Logic)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
182	TVPGBE116	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Back End Domains / Low Power VLSI)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
183	TVPGTO577	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Tools / Cadence EDA)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
184	TVPGTO578	Design of Two Stage Operational Amplifier and Implementation of Flash ADC (Tools / Tanner EDA)	The aim of this paper is to implement a Flash ADC structure consists of a resistive ladder network, comparators, and the thermometer to a binary encoder. Encoder structure in this paper is implemented using 2:1 mux based on switch logic.
185	TVMABE116	A Very-Low-Voltage Frequency Divider in Folded MOS Current Mode Logic With Complementary n- and p-type Flip-Flops (Back End Domains / Transistor Logic)	The main aim of this project is to reduce the power in Frequency divided by 16 circuit by using FCML with novel architecture.
186	TVMATO726	A Very-Low-Voltage Frequency Divider in Folded MOS Current Mode Logic With Complementary n- and p-type Flip-Flops (Tools / Tanner EDA)	The main aim of this project is to reduce the power in Frequency divided by 16 circuit by using FCML with novel architecture.
187	TVMATO727	A Very-Low-Voltage Frequency Divider in	The main aim of this project is to



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S.No	Project Code	Project Name	Objective
		Folded MOS Current Mode Logic With Complementary n- and p-type Flip-Flops (Tools / Cadence EDA)	reduce the power in Frequency divided by 16 circuit by using FCML with novel architecture.
188	TVPGBE121	A Very-Low-Voltage Frequency Divider in Folded MOS Current Mode Logic With Complementary n- and p-type Flip-Flops (Back End Domains / Transistor Logic)	The main aim of this project is to reduce the power in Frequency divided by 16 circuit by using FCML with novel architecture.
189	TVPGTO587	A Very-Low-Voltage Frequency Divider in Folded MOS Current Mode Logic With Complementary n- and p-type Flip-Flops (Tools / Cadence EDA)	The main aim of this project is to reduce the power in Frequency divided by 16 circuit by using FCML with novel architecture.
190	TVPGTO588	A Very-Low-Voltage Frequency Divider in Folded MOS Current Mode Logic With Complementary n- and p-type Flip-Flops (Tools / Tanner EDA)	The main aim of this project is to reduce the power in Frequency divided by 16 circuit by using FCML with novel architecture.
191	TVPGFE102	RandShift: An Energy-Efficient Fault-Tolerant Method in Secure Nonvolatile Main Memory (Front End Domains / Communications and Crypto Core)	The main objective of this paper is to reduce the error rate and power in encrypted data encoded by the Advanced Encryption Standard. This paper is implemented with the randomness feature of AES encryption as well as rotational shift operation to tolerate hard faults in nonvolatile memory cells
192	TVPGTO396	RandShift: An Energy-Efficient Fault-Tolerant Method in Secure Nonvolatile Main Memory (Tools / Xilinx Vivado)	The main objective of this paper is to reduce the error rate and power in encrypted data encoded by the Advanced Encryption Standard. This paper is implemented with the randomness feature of AES encryption as well as rotational shift operation to tolerate hard faults in nonvolatile memory cells
193	TVPGTO397	RandShift: An Energy-Efficient Fault-Tolerant Method in Secure Nonvolatile Main Memory (Tools / Xilinx ISE)	The main objective of this paper is to reduce the error rate and power in encrypted data encoded by the Advanced Encryption Standard. This paper is implemented with the randomness feature of AES encryption as well as rotational shift operation to tolerate hard faults in nonvolatile memory cells
194	TVMATO481	RandShift: An Energy-Efficient Fault-Tolerant Method in Secure Nonvolatile Main Memory (Tools / Xilinx Vivado)	The main objective of this paper is to reduce the error rate and power in encrypted data encoded by the Advanced Encryption Standard. This paper is implemented with the randomness feature of AES encryption as well as rotational shift

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S.No	Project Code	Project Name	Objective
			operation to tolerate hard faults in nonvolatile memory cells
195	TVMATO482	RandShift: An Energy-Efficient Fault-Tolerant Method in Secure Nonvolatile Main Memory (Tools / Xilinx ISE)	The main objective of this paper is to reduce the error rate and power in encrypted data encoded by the Advanced Encryption Standard. This paper is implemented with the randomness feature of AES encryption as well as rotational shift operation to tolerate hard faults in nonvolatile memory cells
196	TVMAFE101	RandShift: An Energy-Efficient Fault-Tolerant Method in Secure Nonvolatile Main Memory (Front End Domains / Communications)	The main objective of this paper is to reduce the error rate and power in encrypted data encoded by the Advanced Encryption Standard. This paper is implemented with the randomness feature of AES encryption as well as rotational shift operation to tolerate hard faults in nonvolatile memory cells
197	TVMAFE111	High-Speed Area-Efficient VLSI Architecture of Three-Operand Binary Adder (Front End Domains / Arithmetic Core)	In this project, a high-speed area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications
198	TVPGFE95	High-Speed Area-Efficient VLSI Architecture of Three-Operand Binary Adder (Front End Domains / Arithmetic Core)	In this project, a high-speed area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications
199	TVPGTO384	High-Speed Area-Efficient VLSI Architecture of Three-Operand Binary Adder (Tools / Xilinx Vivado)	In this project, a high-speed area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications
200	TVPGTO385	High-Speed Area-Efficient VLSI Architecture of Three-Operand Binary Adder (Tools / Xilinx ISE)	In this project, a high-speed area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications
(Page 27)	TVMATO469	High-Speed Area-Efficient VLSI Architecture of	In this project, a high-speed area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications

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S.No	Project Code	Project Name	Objective
		Three-Operand Binary Adder (Tools / Xilinx Vivado)	area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications
202	TVMATO470	High-Speed Area-Efficient VLSI Architecture of Three-Operand Binary Adder (Tools / Xilinx ISE)	In this project, a high-speed area-efficient adder technique is proposed to perform the three operands binary addition for efficient computation of modular arithmetic used in cryptography and PRBG applications
203	TVMABE79	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Back End Domains / Core Memories)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
204	TVMABE80	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Back End Domains / Cadence EDA)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
205	TVPGBE80	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Back End Domains / Cadence EDA)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
206	TVPGBE81	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Back End Domains / Core Memories)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
207	TVPGTO61	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Tools / Cadence EDA)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
208	TVPGTO62	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Tools / Tanner EDA)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.

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S.No	Project Code	Project Name	Objective
209	TVMATO426	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Tools / Cadence EDA)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
210	TVMATO427	Data Retention based Low Leakage Power TCAM for Network Packet Routing (Tools / Tanner EDA)	The main objective of this paper is to reduce the leakage power for data retention based ternary content addressable memory and it can be reduced by using the continuous feature of mask data.
211	TVMABE66	High-Speed and Area-Efficient Scalable N-bit Digital Comparator (Back End Domains / Low Power VLSI)	This paper presents the area efficient N-bit digital comparator and it was designed with the help of two different modules which are comparison evaluation modules (CEM) and the second module is the final module (FM).
212	TVPGBE66	High-Speed and Area-Efficient Scalable N-bit Digital Comparator (Back End Domains / Low Power VLSI)	This paper presents the area efficient N-bit digital comparator and it was designed with the help of two different modules which are comparison evaluation modules (CEM) and the second module is the final module (FM).
213	TVPGTO09	High-Speed and Area-Efficient Scalable N-bit Digital Comparator (Tools / Tanner EDA)	This paper presents the area efficient N-bit digital comparator and it was designed with the help of two different modules which are comparison evaluation modules (CEM) and the second module is the final module (FM).
214	TVPGTO350	High-Speed and Area-Efficient Scalable N-bit Digital Comparator (Tools / Cadence EDA)	This paper presents the area efficient N-bit digital comparator and it was designed with the help of two different modules which are comparison evaluation modules (CEM) and the second module is the final module (FM).
215	TVMATO418	High-Speed and Area-Efficient Scalable N-bit Digital Comparator (Tools / Cadence EDA)	This paper presents the area efficient N-bit digital comparator and it was designed with the help of two different modules which are comparison evaluation modules (CEM) and the second module is the final module (FM).
216	TVMATO419	High-Speed and Area-Efficient Scalable N-bit Digital Comparator	This paper presents the area efficient N-bit digital comparator and

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S.No	Project Code	Project Name	Objective
		(Tools / Tanner EDA)	it was designed with the help of two different modules which are comparison evaluation modules (CEM) and the second module is the final module (FM).
217	TVMABE49	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Back End Domains / Low Power VLSI)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
218	TVMABE50	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Back End Domains / Cadence EDA)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
219	TVPGBE63	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Back End Domains / Cadence EDA)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
220	TVPGBE64	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Back End Domains / Low Power VLSI)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
221	TVPGTO02	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Tools / Tanner EDA)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
222	TVPGTO364	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Tools / Cadence EDA)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus

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S.No	Project Code	Project Name	Objective
			proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
223	TVMATO449	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Tools / Cadence EDA)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
224	TVMATO450	A Low-Power High-Speed Sense-Amplifier-Based Flip-Flop in 55 nm MTCMOS (Tools / Tanner EDA)	The main objective of this work is to reduce the power and to increase the speed of the sense amplifier and the latch was designed with a glitch-free and contention-free. Thus proposed SAFF is a good choice for replacing master-slave flip-flop in digital systems
225	TVREBE19_16	Parametric and Functional Degradation Analysis of Complete 14-nm FinFET SRAM (Back End Domains / Cadence EDA)	The main objective of this paper is to analyze how aging impacts the parametric as well as the functional reliability of the memory
226	TVREBE19_17	Parametric and Functional Degradation Analysis of Complete 14-nm FinFET SRAM (Back End Domains / Transistor Logic)	The main objective of this paper is to analyze how aging impacts the parametric as well as the functional reliability of the memory
227	TVPGTO433	Parametric and Functional Degradation Analysis of Complete 14-nm FinFET SRAM (Tools / Cadence EDA)	The main objective of this paper is to analyze how aging impacts the parametric as well as the functional reliability of the memory
228	TVPGFE286	Carry select adder using BEC and RCA (Front End Domains / Arithmetic Core)	The main objective of this work is to use Binary to Excess-1 Converter (BEC) instead of RCA in the regular CSLA to achieve high speed and low power consumption.



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