



ERODE SENGUNTHAR

ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai, Accredited by National Board of Accreditation (NBA), New Delhi & National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade

PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PROJECT LIST

Name of the Project	Name of the Student	Name of the Faculty	Type of Project (application / real-time/ R&D)	Address the issue	POs & PSOs	Outcome of the Project
Academic year 2022-2023						
Automatic headlight dimmer for vehicles using Light dependent resistor Sensor.	Akilan S GokulL SriarthikN VenkateshBabu N S	Mr.M.Karthikkumar	Real-time	The dangerous glare from high-beam headlights, which impairs the vision of oncoming drivers and increases the risk of accidents, especially at night.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
NLifeguard for swimming pools to detect active drowning	AllwinAbhishaik eV Kathirvel.R SureshbalajiA Surya a	Ms.S.Divya	R&D	Detecting active drowning incidents in real-time, helping to prevent fatalities by providing immediate alerts when swimmers show signs of distress.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal



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Design of IoT based industrial air pollution monitoring system	AshwiniA NaganiranjanaJ RajalakshmiS	Ms.E.L.Dhivya Priya	R&D	Harmful emissions from industrial activities by providing continuous, real-time monitoring of air quality, enabling timely actions to reduce pollution and comply with environmental regulations.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Home Energy Management System Including Renewable Energy Based on GSM And IOT	DharaniDharanA GaneshanK GaneshkumarM KavinprasadM.S	Mr.S.Gladson	Application	Inefficient energy use and reliance on non-renewable sources by enabling real-time monitoring, control, and integration of renewable energy sources, optimizing energy consumption and reducing costs.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Drivers Hypnagogic State Detection and Alert System	Dineshkumar S RajabrabhuM SatheshKumar S VishnuS	Ms.C.Mekala	R&D	Drowsy driving by detecting early signs of driver fatigue and providing timely alerts to prevent accidents.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Presented a paper in International Conference



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Design of High-Speed Multiplier Using Hybrid Technique with FPGA Implementation	DivyaT GokulapriyaM MadhubalaM RamyaN	Mr.V.Thamizharasan	R&D	The design addresses speed limitations, resource constraints, and power consumption challenges in FPGA-based multipliers.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Hadamard Coded Modulation for Optical Wireless Communication and Performance Analysis	GideonDuraiP GowthamS HariKrishnan S Jayabal.V	Ms.K.R. Priyadharshini	Application	The need for enhanced data rate, improved signal robustness, and efficient bandwidth utilization.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Implementation of MIMO for LIFI with spatial diversity and spatial multiplexing	GowsalyaM ParimalaN Ramya GowriK Deepa.G	Dr.R.Kalaivani	Application	Limitations in data rate, range, and reliability in optical wireless communication.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Automatic fire extinguisher using IOT	KirubaShankarP Naveen K Pradeep M Vinoth J	Dr.S.Bharathidasan	R&D	The need for rapid fire detection and response to minimize damage and enhance safety in critical areas	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal



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A Wearable Device For Independent Living of the Visually Impaired	LogeshM NirmalKumar V Prasath.S SaranrajN	Mr.M. Balamurugan	Application	A wearable device for the visually impaired addresses challenges in navigation, obstacle detection, and independent living support.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Vehicle Management System with Alcohol Detection using Internet of things	NadhaKumarR Sedhuramalinga mL ShivaSurryanS VenkadeshS	Dr.M.Sundaram	Real time	The issue of impaired driving by ensuring driver sobriety and enhancing road safety.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Presented a paper in International Conference
Border Alert System for fisherman using GPS	Purnachandrigaa R SelvanayakiM VishnupriyaS	Ms.M.A.Asuvanthi	Application	The issue of unintentional crossing of maritime boundaries, ensuring compliance with fishing regulations and enhancing safety at sea.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Published in International Journal
Web Monitoring and Speed Control of Solar Based BLDC Motor	BoopathiS Kiriraj S TamizhanR	Ms.Jasmin Shipa	R&D	The challenge of efficient energy management and real-time performance monitoring in renewable energy applications.	PO1, PO2, PO3, PO4, PO5, PO6, PO9, PO10, PO11, PSO1, PSO2, PSO3	Presented a paper in International Conference