



CVR COLLEGE OF ENGINEERING

(An UGC Autonomous Institution with NAAC 'A' Grade, Affiliated to JNTUH)
 Vastunagar, Mangalpalli (V), Ibrahimpatan (M), R.R. District, Telangana
 Ph. No:91-8414 - 661601, 661675

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PATENTS PUBLISHED/GRANTED (A.Y. 2024-25)

S. No.	Academic Year	Patent Details	Name of the Faculty	Patent status published/granted	Patent Number	Date of Published/Granted
1	2024-25	Broadband compact 3dB directional coupler for dual circular polarization in case of collocated/frequency reuse satellites	1. Dr L Nageswara Rao 2. CH V R S Gopala Krishna	Published	202441064481	06-09-2024
2	2024-25	Compact Multiband Miniaturized Hybrid Dielectric Resonator Antenna for Wireless Body Area Network Applications	Dr Nageswara Rao Lavuri	Published	202441064480	06-09-2024
3	2024-25	A compact wideband corrugated horn antenna to illuminate a shaped reflector for satellite applications in C-Band	1. CH V R S Gopala Krishna 2. Dr L Nageswara Rao 3. Dr K Yedukondalu	Published	202441068448	20-09-2024
4	2024-25	System and method for enhancing 5g MIMO performance using deep learning technique	Dr Nageswara Rao Lavuri	Published	202441068460	04/10/2024
5	2024-25	Development of efficient model for video inpainting using optimized neural networks with hybrid optimization algorithm	1. Dr. B. Janardhana Rao 2. Dr. Venkata Krishna Odugu 3. Dr. Gade Harish Babu	Published	202441072669	04/10/2024
6	2024-25	Development of village labour adda to reduce unemployment in rural areas through mobile application	1. Dr. Gade Harish Babu 2. Dr. Venkata Krishna Odugu 3. Dr. B. Janardhana Rao	Published	202441093034	06/12/2024
7	2024-25	Real-Time Noise Reduction in Speech Signals Using Optimized Recurrent Neural Networks on Edge Device	1. S. Ravikanth 2. Dr.K. Arun Kumar Katkoori	Published	202441095869	13/12/2024
8	2024-25	Integration of drones in smart waste management: an automated system for waste collection	1. Humaira Nishat 2. Shakeel Ahmed 3. Malleswari A 4. R Prameela Devi 5. P. Kavitha	Published	202441098088	20/12/2024

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9	2024-25	Energy-Efficient Smart security: real time motion detection and Mobile alerts	1. Mr.S. Ravikanth 2. Mr. G. Ravikumar Reddy 3. Mr. B. Shankar	Published	202441099841	03/01/2025
10	2024-25	Memory and power efficient two-dimensional finite impulse response filter architecture using block processing and optimized multipliers for image processing applications	1. Dr. Venkata Krishna Odugu 2. Dr. B. Janardhana Rao 3. Dr. Gade Harish Babu	Published	202441099859	03/01/2025
11	2024-25	Fingerprint based electronic voting machine	1. G Ravi Kumar Reddy 2. S. Ravikanth 3. B. Shankar 4. G. Santhosh Kumar	Published	202441100220	03/01/2025
12	2024-25	Extraction and realization of a 3-d object skeleton	1. Perumalla Srinivasa Rao 2. Yedukondalu Kamatam 3.Racha Ganesh 4. Gosula Ravi Shankar Reddy	Published	202441101879	10/01/2025
13	2024-25	Multifunctional Smart Bot with Eye Blink control: Especially for physically challenged persons.	1. Mr. Bhukya Shankar 2. Mr. S. Ravikanth 3. Mr. G. Ravikumar Reddy	Published	202441101921	10/01/2025
14	2024-25	A service quality conscious combined management technique for millimeter wave based heterogeneous networks	1. Dr.L.Manjunath 2. Dr.D. Shyam Prasad 3. Ms.R.Prameela Devi	Published	202541001631	17-01-2025
15	2024-25	Intelligent Irrigation Automation System Using Machine learning and Cloud-Connected iot Devices	1. Dr R.Prakash Kumar 2. Dr Arun Kumar Katkoori 3. Dr.D Bhanu Prakash 4. Mr G Santhosh Kumar 5. Mr R Satya Prakash	Published	202541007145	07-02-2025
16	2024-25	Speech-based emotion recognition system for mental health assessment	1. Ms. M Santhoshi 2. Ms. Jyostna J 3. Ms. Sapidi Sailaja	Published	202541007155	07-02-2025
17	2024-25	A Robust Hybrid Heuristic Model for 5G Networks	1. Dr. Swapna. T	Published	202541008607	14-02-2025

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18	2024-25	Power-efficient multiply-accumulate (mac) unit for convolutional neural network (cnn) accelerators	1. Silpa Kesav Velagaleti 2. Nayanathara K Sattiraju 3. Perumalla Srinivasa Rao	Published	202541013113	21-02-2025
19	2024-25	Gesture-controlled solar-powered automated cobweb cleaner	1. Dr. R. Prameela Devi 2. Dr. Humaira Nishat 3. Dr. G. Ravishankar Reddy 4. Dr. L. Manjunath 5. Malleswari Akurati 6. A. Anitha	Published	202541013704	28-02-2025
20	2024-25	A System and Method for SOLAR-POWERED THERMAL VISION SURVEILLANCE AI Based ROBOT	1. Dr. Dhruva R. Rinku 2. Dr. K.A Jyotsna 3. G. Vijaya Nirmala 4. Dr. P. Hema Sree 5. Dr. T. Padmavathi	Published	202541014151	07-03-2025
21	2024-25	Modular and Reconfigurable 2D FIR Filter Architectures for Reduced Computational Complexity for Low power VLSI designs	P. Kavitha	Published	202541016357	07-03-2025
22	2024-25	Integrated health parameter analysis system for different age groups	1. Mr.Racha Ganesh 2. Dr. K. Lal Kishore 3. Dr. Perumalla Srinivasa Rao 4. Dr. Yedukondalu Kamatam	Published	202541018354	14-03-2025
23	2024-25	A Blockchain-Based Framework for Encrypted Data Storage and Secure Communication in iot Networks	Dr. Swapna. T	Published	202541019538	21-03-2025
24	2024-25	Ai-driven system for real-time traffic flow prediction using deep learning	1. Ms. Jyostna J 2. Ms. Sapidi Sailaja 3. Ms. M Santhoshi	Published	202541020021	21-03-2025
25	2024-25	A novel design of few transistors based approximate adders & compressors for approximate hardware multiplier architecture	1. Dr. Venkata Krishna Odugu 2. Dr. B. Janardhana Rao 3. Dr. Gade Harish Babu	Published	202541020121	21-03-2025

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26	2024-25	A Deep Learning-Based System for Improving High-Resolution Images in Real Time	1. Dr. D. Bhanu Prakash 2. Dr. Arun Kumar Katkoori 3. Dr. R. Prakash Kumar	Published	202541020109	21-03-2025
27	2024-25	Integrated health monitoring system for timely medication and vital sign tracking	1. Dr. Parimi Hema Sree 2. Dr. B. Janardhana Rao 3. Ms. G Vijaya Nirmala	Published	202541023154	28/03/2025
28	2024-25	AI-Driven Adaptive Plant Irrigation System Using Iot Sensors	1. Ms. A. Anitha 2. Mr. G. Santhosh Kumar 3. Ms. P. Kavitha 4. Dr. R. Prakash Kumar 5. Dr. R. Prameela Devi	Published	202541023842	28/03/2025
29	2024-25	Neural network based mixed signal digital to analog converter introduce a synaptic decay for biomedical applications	G. Snehalatha	Published	202541023960	28/03/2025
30	2024-25	The AI-Driven Automated Door System with Embedded Contactless Temperature Detection	1. Mr.G Santhosh Kumar 2. Dr. R. Prakash Kumar 3. Dr. Arun Kumar Katkoor 4. Dr.D.Bhanu Prakash 5. Mr.G.Ravikumar Reddy	Published	202541023864	28/03/2025
31	2024-25	Smart communication between electric vehicles and charging stations in an electric vehicular network	Dr. Humaira Nishat	Published	202541024407	28/03/2025
32	2024-25	Hybrid African Vulture Firefly Algorithm-Based Convolutional Neural Network for Enhanced Image Dehazing	1.Dr. R. Prakash Kumar 2.Mr. G. Santhosh Kumar 3.Dr. Arun Kumar	Published	202541030727	02-05-2025

S. No.	Academic Year	Patent Details	Name of the Faculty	Patent status published/ granted	Patent Number	Date of Published/ Granted
		Applications	katkooor 4.Dr. D. Bhanu Prakash Ms. A. Anitha			
33	2024-25	Performance Analysis of Array Multipliers using Different Logic Configurations	Govulla Ravi Kumar Reddy	Published	202541036269	09-05-2025
34	2024-25	Efficient Teaching Learning Management System Using Optimized Technologies	1.Mr. Banothu Bapuji 2.Dr. Venkata Krishna Odugu 3.Dr.Gade Harish Babu	Published	202541036319	09-05-2025
35	2024-25	Quantum-Resistant AES-Based Encryption Framework for Secure Data Protection	Nune Naresh Chary	Published	202541035753	09-05-2025
36	2024-25	Machine Learning-Based Leakage Prediction and Control in CMOS VLSI Circuits	Mr. M. Srinu	Published	202541035001	09-05-2025
37	2024-25	Next-Gen Vehicle Safety System with Digital Fuel Tracking	1.Ms. P. Kavitha 2.Ms. A. Anitha 3.Mr G. Santhosh Kumar 4.Ms. V. Sreelatha Reddy 5.Dr. Humaira Nishat	Published	202541038957	16-05-2025
38	2024-25	Adaptive Beamforming Techniques For Ultra-Dense 6g Networks	Malleswari Akurati	Published	202541039709	16-05-2025
39	2024-25	Advanced Machine Learning Techniques for Brain Disease Diagnosis	Mr. S. Ravikanth	Published	202541038851	16-05-2025
40	2024-25	Optimized Thermal Radiation Mechanisms for Minimizing EM Exposure in 5G Networks	Mr. G. Santhosh Kumar	Published	202541039712	16-05-2025
41	2024-25	Optimized Cluster-Based Routing and Data Aggregation in Wireless Sensor Networks Using Hybrid MFO-WOA and Compressive Sensing	Mr. P. NAVEEN KUMAR	Published	202541039405	16-05-2025
42	2024-25	Integrating IoMT And Blockchain for Electronic Health Records	Dr. Swapna. T	Published	202541041227	23-05-2025
43	2024-25	AI-Enabled Emergency Aerial Responder (AEARescue)	A. Anitha	Published	202541041599	30-05-2025

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44	2024-25	Multimodal Source For Continuous Remote Monitoring Framework In Digital Health Using Fused Feature-Oriented Deep Learning And Natural Language Processing	1.M Santhoshi 2. Jyostna J	Published	202541043779	30-05-2025
45	2024-25	Ai-Based System For Pneumonia Detection Using Chest X-Ray Images	1.Jyostna J 2.M Santhoshi	Published	202541045237	30-05-2025
46	2024-25	Edge-Enabled AI System for Proactive Home Security and Unusual Activity Recognition	Dr. R. Prameela Devi	Published	202541050046	30-05-2025
47	2024-25	Optimized Hybrid Carry-Select Adder With Fixed-Length Adders For High-Speed Arithmetic	Dr.S.Swetha	Published	202541042103	30-05-2025
48	2024-25	Optimized Design Of Ternary Decoder Using Cntfet For High-Performance Computing	Dr.S.Swetha	Published	202541042125	30-05-2025
49	2024-25	Decentralized Secure Communication Protocol For Connected Vehicles Using Blockchain	B. RAMESH	Published	202541043716	30-05-2025
50	2024-25	Neuromorphic Approach to Resolving the Speed Power Accuracy Tradeoff In Adcs	G. Snehalatha	Published	202541042128	30-05-2025
51	2024-25	IoT Enabled Wi-Fi Based Smart Car Assistance for Real-Time Monitoring and Control	Bhukya Shankar	Published	202541043318	30-05-2025
52	2024-25	Ai-Assisted Vision Detection Device for Teachers to Identify Ocular Abnormalities in Students	Dr. Dhruva R. Rinku	Published	202541053597	13-06-2025
53	2024-25	System And Method for Terahertz Band Communication In 6g Networks	1.Malleswari Akurati 2.Dr. Humaira Nishat	Published	202541051168	13-06-2025
54	2024-25	Agricultural Sensor Data Fusion and Analysis System Using Machine Learning Techniques.	S. Ravikanth	Published	202541053893	13-06-2025
55	2024-25	An Ultra-Low Leakage, Wide-Range Level Shifter for Energy-Efficient SoC Applications	Silpa Velagaleti	Published	202541052173	13-06-2025
56	2024-25	Low-Power, High-Precision	Silpa Velagaleti	Published	202541052192	13-06-2025

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		Voltage and Current Reference design for CMOS Circuits				
57	2024-25	FPGA-Accelerated Hyperdimensional Computing for Edge AI	1.Mr. Nune Naresh Chary 2.Mr. P. Naveen Kumar 3.Mr. M. Srinu	Published	202541053009	13-06-2025
58	2024-25	Black Chain-Secured IOT Communication Protocol For Fault Tolerant And Low Latency Wireless Sensor Networks Architectures	1.Mr. M. SRINU 2.Mr. Nune Naresh Chary 3.Mr. P. Naveen Kumar	Published	202541053006	13-06-2025
59	2024-25	NeuralNetWSN: AI-Powered Sensor Network for Adaptive Sensing and Routing	1.Mr. P. Naveen Kumar 2.Mr. M. SRINU 3.Mr. Nune Naresh Chary	Published	202541052162	13-06-2025
60	2024-25	Leakage Power Utilization System For Subthreshold Logic Designs	Esther Rani Thuraka K.A. Jyotsna	Published	202541050729	13-06-2025
61	2024-25	Advancements in 3D Stacking and Integration of GAAFETs for Next-Generation Mobile and AI Semiconductor Devices	Mudavath Srinu	Published	202541057993	27-06-2025
62	2024-25	System for Predictive Environmental and Health Monitoring Using IoT-Enabled WSN with Deep Learning and Efficient Routing Protocols	Mrs. Chandrika Saxena	Published	202541058807	27-06-2025
63	2024-25	Multimodal Deep Learning System for Disease Prediction using Dynamic Tongue Biomarkers and Microbiome-Aware Image Analysis	Mrs. Chandrika Saxena	Published	202541058820	27-06-2025
64	2024-25	Gan Based Channel Estimation For Ofdm System	T Padmavathi Esther Rani Thuraka	Published	202541056787	27-06-2025