



BVRIT HYDERABAD College of Engineering for Women

(UGC Autonomous Institution | Approved by AICTE | Affiliated to JNTUH)

(NAAC Accredited – A Grade | NBA Accredited (EEE, ECE and CSE))

Bachupally, Hyderabad -500 090

Department of ECE

Patents Information – Published / Granted - Summary

S. No	Type of Patent	Published	Granted
1	Indian Utility Patent	112	2
2	Indian Design Patent	6	
3	UK Design Patent	4	

Indian Utility Patents			
S. No	Year	Published	Granted
1	2018	1	
2	2021	4	
3	2022	6	
4	2023	16	
5	2024	21	1
6	2025	26	
7	2026	38	1

Patents Information – Granted – Utility – National

S. No	Applicant Name (s)	Title	Application Number	Year Date of Grant
1	Dr J Naga Vishnu Vardhan	A Portable Medicine Identification and Alerting System for Visually Challenged People and Geriatrics (Indian – Utility Patent)	531064	2024 29-03-2024
2	Mr N M Sai Krishna Mr R Priyakanth	System and Method for Enhancing Safety of a Driver	590810	2026 01-06-2026

Patents Information – Published – Utility – National

S. No	Applicant Name (s)	Title	Application Number	Year Date of Publish
1	Dr V. Hindumathi Ms. G. Rama Lakshmi Ms R Sahithi	An Intelligent IoT- Based Smart Communication and Monitoring System for Real-Time Data Transmission	202641061033	2026 29-05-2026
2	Dr. V. Hindumathi	An Autonomous Aerial Vehicle for Disaster Surveillance and Rescue Operations	202641062216	2026 29-05-2026
3	Dr. M. Parvathi Ms. T. Amy Prasanna Dr. Y. Alekhya	Voice Based Shower System for Physically Challenged Individuals	202641053312	2026 15-05-2026
4	Ms G Rama Lakshmi Dr Y Alekhya Dr G Purnachandra Rao	Li-Fi based Audio and Binary Data Transmission	202641057373	2026 15-05-2026
5	Dr K Vasu Babu	Thermally Tunable VO2-Based Metamaterial Absorber for Terahertz Biomedical Sensing and Cancer Cell Detection	202641055853	2026 15-05-2026
6	Dr. L. Bhargava Kumar Dr. Anwar Bhasha Pattan	Innovative Cooling Solution For Parked Vehicles In Hot Climates	202641053353	2026 15-05-2026
7	Dr G Purnachandra Rao	A client side smart travel planning system for personalized itinerary generation with budget optimization	202641050645	2026 01-05-2026
8	Dr G Purnachandra Rao	An ESP32-based Air mouse system with motion controlled and wireless clipboard operations	202641050646	2026 01-05-2026
9	Dr M. Kalpana Chowdary Dr Y Alekhya Dr G Purnachandrarao	A Low-Power VLSI Architecture for ECG Arrhythmia Detection Using Shift Based Neural Network Computation	202641050615	2026 01-05-2026
10	Dr J Naga Vishnu Vardhan Mr G Sreenivasa Rao Mr T Siva Sankar	Life Guard UAV: Drone for Disaster Management	202641049009	2026 01-05-2026
11	Dr. V Santhosh Kumar	Face Recognition and Tracking Robot	202641046611	2026 24-04-2026
12	Dr L Bhargava Kumar	Invisible Watchdogs: Wi-Fi CSI-Based Home Monitoring	202641046604	2026 24-04-2026

13	Dr. Anwar Bhasha Pattan Dr D Venkata Siva Prasad	A Smart Microcontroller-Based Gas Hazard Detection System with Automated Safety Response Mechanism	202641046987	2026 24-04-2026
14	Dr. G Purnachandrarao Dr M Kalpana Chowdary Dr. Y Alekhya	A Multi-Task Deep Learning System for Food Freshness and Spoilage Severity Assessment	202641044163	2026 24-04-2026
15	Dr. Y Alekhya	Radiation tolerant SRAM design for space systems	202641046896	2026 24-04-2026
16	Dr. Anwar Bhasha Pattan Dr. L. Bhargava Kumar	Intelligent Water Quality Monitoring Device using ESP32-CAM with On-Device CNN Inference	202641043170	2026 17-04-2026
17	Dr. L. Bhargava Kumar	Cooking Oil Purity Checker	202641044486	2026 17-04-2026
18	Dr. Anwar Bhasha Pattan	Smart Manhole Monitoring and Hazard Alert System using IoT and Multi-Sensor Fusion	202641043145	2026 17-04-2026
19	Dr. Anwar Bhasha Pattan	A Cost-Effective Microcontroller-based Solar Panel Maintenance System with Automated Cleaning and Sun Tracking	202641043169	2026 17-04-2026
20	Dr M Kalpana Chowdary, Dr. G Purnachandrarao, Ms. Amy Prasanna	A System and Method for Email Spam Detection Using Hybrid CNN and Bidirectional LSTM Networks	202641044178	2026 17-04-2026
21	Dr. L. Bhargava Kumar	Electronic Nose	202641029436	2026 27-03-2026
22	Mr. N Srinivasa Rao Dr. G Purnachandrarao	IoT enabled Isolation Ward Robot	202641028724	2026 20-03-2026
23	Mr Sai Kumar Tara Dr. G Purnachandrarao	Experimental evaluation of transform & filtering methods for generalized images	202641019647	2026 06-03-2026
24	Dr. Y Alekhya Dr. G Purnachandrarao Ms. G. Rama Lakshmi	A Mixed-Logic Based Low-Power and High-Speed Line Decoder Architecture Using Gate Diffusion Input and Dual-Value Logic	202641023390	2026 06-03-2026
25	Mr. P. Rajesh Kumar Dr. G. Purnachandra Rao Ms. T. Amy Prasanna	Vehicle Number Plate Detection using Optical Character Recognition	202641016028	2026 20-02-2026
26	Dr Nagesh Deevi Dr M Ranjeeth	Wireless Power Transfer Enables For Devices	202641013363	2026 20-02-2026

27	Dr M Ranjeeth	Real-Time Air Quality Monitoring System Using IOT and MATLAB	202641016397	2026 20-02-2026
28	Dr M Ranjeeth	FPGA based Anti-Sleep Detection System for Driver Safety	202641056697	2026 15-02-2026
29	Dr Nagesh Deevi Dr M Ranjeeth	Crowd Monitoring Drone	202641010757	2026 13-02-2026
30	Mr N.M. Sai Krishna Mr. R. Priyakanth Mr. K. Mahesh Babu Mr. G. Sreenivasa Rao	Autonomous Driving Vehicle Based System and Method For Crop Disease Management And Pesticide Application	202541096017	2026 30-01-2026
31	Dr K Vasu Babu	Novel Graded Index Meta surface Architecture for Gain Enhancement in 5G Millimeter-Wave Antennas	202641004982	2026 30-01-2026
32	Ms. Rajidi Sahithi, Dr. V Santhosh Kumar, Ms. G Rama Lakshmi	An AI-Driven Camera-Assisted Approach for Managing Digital Distractions in Smart Classrooms	202641001215	2026 23-01-2026
33	Dr V.Hindumathi , Ms Ramalakshmi Gali, Ms Praveena Manne	A Real-Time Stress and Deception Detection System Using Biometric Sensors	202641001146	2026 16-01-2026
34	Ms M Praveena, Ms R Sahithi, T Ms Amy Prasanna	IntelliGas Keeper	202641000231	2026 16-01-2026
35	Ms Rama Lakshmi Gali Ms Praveena Manne Ms R Sahithi, T	Leaf Link: Stay Connected with your Plants, Instantly	202641000831	2026 16-01-2026
36	Ms Rama Lakshmi Gali Dr V Hindumathi	Pollution PM Analyzer Using Arduino	202641000285	2026 16-01-2026
37	Ms. T Amy Prasanna Dr. M Parvathi Dr. M Kalpana Chowdary	Power Optimized 32 Bit ALU Design Using Clock Gating And Clock Scaling	202541129152	2026 02-01-2026
38	Dr. Y Alekhya, Dr. M. Kalpana Chowdary Dr. M. Parvathi	USB using Reversible Logic	202541128511	2026 01-01-2026

2025				
1	Dr Nagesh Deevi Dr M Ranjeeth	Design And Implementation Of 4 Bit ALU Using Reversible Logic	202541118006	2025 19-12-2025
2	Dr G Purnachandra Rao Mr Sai Kumar Tara Dr Nagesh Deevi	Secure Image and Video Steganography using GANs	202541097266	2025 14-11-2025
3	Mr R Priyakanth Mr N M Sai Krishna Mr G Sreenivasa Rao	System and method for accessible Snakes and Ladders game for Visually Impaired Users	202541064940	2025 29-08-2025
4	Dr. V. Hindumathi Rama Lakshmi Gali	Wireless Data Encryption and Decryption for Secured Communication	202541056411	2025 20-06-2025
5	Dr. K Vasu Babu	Design of Ultra-Wideband Circular Patch Antenna for Breast Cancer Detection in the Terahertz Frequency Range	202541053325	2025 13-06-2025
6	Ms. M Praveena	Colour Smart Currency Reader	202541054343	2025 13-06-2025
7	Ms. M Praveena Ms. G Rama Lakshmi Ms. R Sahithi	Design and Implementation of Fault-Tolerant High-Performance Adder Architectures for Scalable Digital Systems	202541054577	2025 13-06-2025
8	Dr. V. Santhosh Kumar Dr. M. Ranjeeth	Deep Learning Techniques for Image Super-Resolution in Medical Imaging and Satellite Systems	202541050707	2025 13-06-2025
9	Ms. Rama Lakshmi Gali	Automated Waste Segregation System Using Arduino-Based Sensors	202541053960	2025 13-06-2025
10	Dr. V. Hindumathi Ms. Rama Lakshmi Gali	Post-Quantum Security Chip with Multi-Layer Defense and Zero-Trust Architecture	202541053313	2025 13 -06- 2025
11	Ms. Rajidi Sahithi	Quantum-Inspired DNA Cryptography using LFSR-Driven Sequence Generation	202541054295	2025 13-06-2025
12	Dr V Santhosh Kumar Dr M. Ranjeeth	Deep Learning Techniques for Image Super- Resolution in Medical Imaging and Satellite Systems	202541050707	2025 13-06-2025
13	Dr. Viswanadham R	Seizure Detector and Monitor	202541047220	2025 06-06-2025

14	Dr. Anwar Bhasha Pattan	Emotion Detection Eye Glasses with Audio output for Visually Impaired	202541044219	2025 30-05-2025
15	Dr. Anwar Bhasha Pattan	Smart Medicine Box for Blind with expiry alerts and stock monitoring	202541044346	2025 30-05-2025
16	Dr. K. Vasu Babu	Design and Analysis of Quasi-binomial series array antenna for millimeter (mm) wave for 5G applications	202541037450	2025 16-05-2025
17	Dr M Ranjeeth Dr D. Nagesh	Mobile Signal Booster and Jammer	202541022556	2025 28-03-2025
18	Dr. Viswanadham R	AI-Powered Diagnosis of Erythemato Squamous Diseases	202541026351	2025 28-03-2025
19	Mr. P. Rajesh Kumar	Lane Detection for Urban and Highway Environment	202541022218	2025 21-03-2025
20	Dr Anwar Bhasha Pattan	The intelligent and Eco-Friendly Waste management using IoT Technology	202541017305	2025 07-03-2025
21	Dr T Thammi Reddy Mr Sai Kumar Tara	Cache Controller Design for Enhanced Data Access Rates	202541009410	2025 14-02-2025
22	Dr M Ranjeeth	IoT Healthcare System Based On Esp32 For Smart Home	202541005867	2025 31-01-2025
23	Ms. R Sahithi, Dr. V Hindumathi, Ms. T Amy Prasanna	Smart Kitchen Container	202541005829	2025 30-01-2025
24	Ms. T.Amy Prasanna, Dr. M. Parvathi, Ms. R. Sahithi, Dr. T. Pardhu	Detection of Fruits And their parameters Using Raspberry Pi	202541005853	2025 30-01-2025
25	Mr Sai Kumar Tara Dr T Thammi Reddy	Brain-computer interface for mental state analysis	202541003984	2025 24-01-2025
26	Ms. Rama Lakshmi Gali Ms. M Praveena	Coin Detection Using Image Processing	202541001355	2025 10-01-2025

2024				
1	Dr M Ranjeeth	Self-Stabilizing Spoon For Parkinson's Sufferers	202541005455	2024 31-12-2024
2	Dr V Hindumathi Dr V Santhosh kumar Dr. M. Ranjeeth Dr L Bhargava Kumar	Modulation Schemes Using MATLAB App Designer	202441094616	2024 06-12-2024
3	Dr J Naga Vishnu Vardhan	Textile-Based Antenna for Non-Invasive Monitoring of Tissue Properties in Biomedical Applications	202441084898	2024 15-11-2024
4	Dr Nagesh Deevi	She Shield – A Security Garment for Speech and Mentally Challenged Women	202441084621	2024 15-11-2024
5	Dr K Vasu Babu	Compact and Flexible MIMO Antenna Design for High Performance Wireless Body Area Networks	202441075611	2024 18-10-2024
6	Dr Nagesh Deevi Dr T Pardhu Dr M Ranjeeth	Sign Glove For Physically Disabled	202441072632	2024 04-10-2024
7	Dr J Naga Vishnu Vardhan Ms. M Praveena	Design of Wildlife Detection and Alerting System	202441072975	2024 04-10-2024
8	Dr M Ranjeeth	Virtual Pen Using Opencv Python	202441071529	2024 04-10-2024
9	Dr R Viswanadham Dr Nagesh Deevi Mr R Priyakanth Mr N M Sai Krishna	Rehabilitation Device	202441045908	2024 27-09-2024
10	Dr T Pardhu	Smart Environment System For Real-Time Human Activity Classification Using KINECT and IoT Enabled Machine Learning	202441069701	2024 20-09-2024
11	Mr. K Mahesh Babu Mr. R Priyakanth Mr. N M Sai Krishna Dr Anwar Bhasha Pattan Mr. G Sreenivasa Rao	Borewell Rescue Robot Device, System And Method Related To The Same	202341049097	2024 06-09-2024

12	Mr. R Priyakanth Mr. N M Sai Krishna Mr. G Sreenivasa Rao	Safety Device, System And Method For Monitoring And Rescue Of Coal Mine Workers	202341052485	2024 06-09-2024
13	Dr. Anwar Bhasha Pattan	An IOT-Based Intelligent Landslide Detection and Monitoring System	202441063168	2024 30-08-2024
14	Dr. M. Ranjeeth	Enhanced Fire Detection and Alarming System with AI Based False Alarm Detection	202441058758	2024 09-08-2024
15	Dr. M. Ranjeeth	Smart IoT Technology For Efficient Dry And Wet Waste Segregation	202441054020	2024 02-08-2024
16	Dr Viswanadham Dr B V N S M Nagesh Deevi Mr R Priyakanth	IoT based System and Design Approach for Health Monitoring of Wearable Devices	202441019895	2024 29-03-2024
17	Mr. R Priyakanth Mr. N M Sai Krishna	System and Method for Enhancing Safety of a Driver	202341076498	2024 16-02-2024
18	Mr. R Priyakanth Mr. N M Sai Krishna Mr. K Mahesh Babu Mr. G Sreenivasa Rao	System and Method for Visually Impaired Transcription	202341076497	2024 16-02-2024
19	Mr. R Priyakanth Mr. N M Sai Krishna Mr.G. Sreenivasa Rao	System and Method for Analyzing GAIT Abnormality	202441010410	2024 08-03-2024
20	Mr. T Pardhu	Smart Agriculture Automatic Monitoring System Using Artificial Intelligence	202441005082	2024 09-02-2024
21	Dr. M. Ranjeeth	Method of Evaluation of BER Performance of Noma System Under Various Fading Channels	202341090240	2024 26-01-2024

2023				
1	Mr. R Priyakanth Mr. N M Sai Krishna	System and Method for Waste Water Treatment	202341046053	2023 08-12-2023
2	Mr. T Pardhu	Fire Fighting Robot Using IoT	202341069267	2023 01-12-2023
3	Ms. M Praveena Ms. G Rama Lakshmi Mr N M Sai Krishna	System for footboard avoidance in an automobile and method related to same thereof	20231068050	2023 03-11-2023
4	Mr. T Pardhu	Advanced Prosthetic device with integrated brain-computer interface and Machine learning capabilities	202341058694	2023 06-10-2023
5	Mr. T Pardhu	Neighbourhood Delivery Autonomous Robot	202341062149	2023 06-10-2023
6	Mr. T Pardhu	Autonomous Fire Detection Robot System for Industrial Environments	202341058046	2023 08-09-2023
7	Mr. T Pardhu	Femme Fortress: A Special Women's safety device with Embedded Intelligence	202341057542	2023 08-09-2023
8	Mr. T Pardhu	TRAFFIC SIGN RECOGNITION AND VOICE ALERT SYSTEM USING CNN	202341051844	2023 01-09-2023
9	Mr T Sai Kumar	Deep Convolutional Neural Networks model for IoT Based Adaptive Traffic Control System	202341040966	2023 18-08-2023
10	Mr T Pardhu Dr Anwar Bhasha Pattan Dr K Vasu Babu	Design of Bluetooth-Controlled Motorized Abdomen Scan Equipment	202341037540	2023 18-08-2023
11	Dr J Naga Vishnu Vardhan Mr G Srinivasa Rao	Massage Device system and Method related to the same there of	202341032803	2023 23-06-2023
12	Ms. Shaik Nilofer Ms Sahithi Rajidi Dr. V Santhosh Kumar Ms. Manju P	Wearable continuous body temperature monitoring system	202341031415	2023 16-06-2023

13	Mr T Pardhu Dr Nagesh Deevi Dr Anwar Bhasha Pattan Dr K Vasu Babu Mr N Srinivasa Rao Mr K Mahesh Babu	Design of autonomous sentry robot for surveillance and security	202341030857	2023 26-05-2023
14	Mr T Pardhu Dr Nagesh Deevi Dr Anwar Bhasha Pattan Dr K Vasu Babu Ms. T Amy Prasanna	Design of real-time positioning system-a satellite free navigation	202341030901	2023 05-05-2023
15	Dr M Parvathi	Carbon Nano-Tube field effect transistor based memory device	202341020130	2023 22-03-2023
16	Dr. V Hindumathi Dr J Naga Vishnu Vardhan	IOT and Cloud based Drone Technology for Sustainable Agriculture to Monitor Soil Analysis for Field Planning, Crop Monitoring Irrigation Management Crop Health Assessment Livestock Monitoring Disaster Management Transporting Goods using Machine Learning Algorithms	202341005584	2023 24-02-2023
2022				
1	Mr R Priyakanth Mr N M Sai Krishna	System and Method for Preparing Compos from Food Waste	202241062017	2022 18-11-2022
2	Mr T Sai Kumar	Efficient Deep Image Compression System With Auto-Encoders for Different Subband Frequencies	202241065491	2022 25-11-2022
3	Dr. V Santhosh Kumar Dr. V Hindumathi	A Magneto Sensitive Assembly for Interactive Electronic Devices	20224105911	2022 28-10-2022
4	Mr R Priyakanth Mr N M Sai Krishna Mr G Srinivasa Rao Mr M H N V Prasad	IoT based device and method for detecting Baby's Cry and Reason behind the Baby's Cry	202241055809	2022 14-10-2022
5	Mr R Priyakanth Mr N M Sai Krishna Dr J Naga Vishnu Vardhan Mr G Srinivasa Rao Mr M H N V Prasad	System and Method for Monitoring Intravenous Fluid Liquid in an Intravenous Fluid Bottle	202241054645	2022 07-10-2022

6	Ms. ShaikNilofer Ms. Manju P	Performance of multicarrier modulation techniques with and without proposed MELS channel estimation method.	202211040825	2022 22-07-2022
2021				
1	Dr. V Hindumathi	Adaptive Bandwidth Control to Improve Energy Fairness in 5g Wireless Sensor Network	202111050944	2021 19-11-2021
2	Dr. V Santosh Kumar	An Efficient Enhanced VLSI Architecture of Montgomery Modular Multiplication	202141028654	2021 09-07-2021
3	Dr. M Parvathi Ms. R Sridevi Mr. M Venkatesham	An AI Enabled Method for Parasitic R & C Estimation In Progressive Stacked SRAM Circuits	202141016526	2021 23-04-2021
4	Dr. M Parvathi	AI Enabled Framework for Early Diagnosis of Autism Spectrum Disorder	202141008949	2021 12-03-2021
2018				
1	Dr. J Naga Vishnu Vardhan	Smart Clothing for Patients	201641024774	2018 26-01-2018

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Bachupally, Hyderabad -500 090

Department of ECE

Design Patents

S. No	Applicant Name (s)	Title	Application Number	Year Date of Grant
1	Dr G Purnachandra Rao	Saliva Based Glucose Monitoring Using AI and Machine Learning	466348-001	2025-26 18-07-2025
2	Mr. T Pardhu	Fire Detecting Robot for Industrial Applications (Indian - Design Patent)	390352-001	2023-24 23-02-2024
3	Mr. Sai Kumar Tara	AI based network intrusion detecting device (Indian - Design Patent)	399332-001	2023-24 15-01-2024
4	Mr. T Pardhu	Society Delivery Robotic Device (Indian - Design Patent)	391491-001	2023-24 06-10-2023
5	Mr. T Pardhu	Mountable Device on Prosthetics (Indian - Design Patent)	391492-001	2023-24 22-09-2023
6	Dr. V Hindumathi Dr. V Santhosh Kumar	A Beverage Dispensing unit (Design Patent)	347553-001	2021-22 29-12-2022

UK Patents

S. No	Applicant Name (s)	Title	Application Number	Year Date of Grant
1	Mr T Pardhu	Fire Detecting Robot for Industrial Applications (Design patent –UK)	6295889	2022-23 21-07-2023
2	Mr T Pardhu Dr Nagesh Deevi Dr Anwar Bhasha Pattan	Automated abdominal imaging system (Design patent –UK)	6289638	2022-23 14-07-2023
3	Mr T Pardhu	Variable rating Accumulator charging station with Tools Box (Design patent –UK)	6270282	2022-23 28-03-2023
4	Dr Anwar Bhasha Pattan Dr Nagesh Deevi	Design of Sentry Robot for Surveillance and Security (Design patent –UK)	6272417	2022-23 22-05-2023

	Dr M Parvathi Mr T Pardhu			
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