



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



School of Electrical and Communication

Department of Electronics and Communication Engineering

Details of Patent(s) During Calendar Year 2025

S.No	Application No.	Faculty ID	Inventor Name-Faculty	Dept.	Patent Title
1	202541007420	TTS2198	Dr. Shiyamala. S	ECE	Harnessing Sound Therapy Techniques To Alleviate Migraines And Promote Mental Well-Being
2	202541021593	TTS3311	Dr. Sanjoy Debnath	ECE	Cost Effective Emergency Communication System For Disaster Affected Areas
3	202541029688	TTS3582	Dr. Vaishnavi	ECE	A Dynamic System For Health Tracking And Early Disease Detection In Cattle
4	202541029684	TTS2866	Dr Harikrishna Paik	ECE	Development Of Wideband And High Gain Planar Antenna Based On Artificial Magnetic Conductor For Ku-Band Satellite Systems
5	202541032647	TTS3364	Dr. V. Koushick	ECE	A Compact MIMO Antenna With Wide Band Characteristics For Wi-Fi 6E/X-Band Applications
6	202541038000	TTS2862	Dr. Balaji. L	ECE	Advanced Transform Hardware Architecture For Scalable Medical Imaging Using SHVC
7	202541050951	TTS2196	Dr. Kavitha. T	ECE	H-Shaped Slot L-Patch MIMO Antenna With DGS For 5G And Wi-Fi Applications



8	202541044302	TTS2851	Dr. Aswath.S	ECE	Computing Air Quality Index (AQI) Value Through Mobile Nodesbh
9	202541045470	TTS2421	Dr. Mazher Iqbal. J.L	ECE	An FPGA Implementation Of Motion Based Infrared Imaging System Under Low Light Conditions Using Xilinx System Generator
10	202541050949	TTS3452	Dr. M. Ajisha	ECE	Iot Enabled Monitoring And Control For Sustainable Home Aquaculture
11	202541053124	TTS3568	Dr. Rosi A	ECE	A Novel Approach Using Rfid Tag And Aurdino To Control Emergency Vehicle And High Density Traffic Control
12	202541056566	TTS2198	Dr. Shiyamala. S	ECE	Eradication Of Elephant Mortality Due To Railway Accidents By Using Infrasonic Sound
13	202541056562	TTS1851	Ambika Bhuvaneswari. C	ECE	Universal Configurable Web-Based Portable Anti-Islanding Detection And Control System
14	202541066761	TTS3438	Dr. David Neels Ponkumar. D	ECE	Smart Farming Security Through Blockchain And The Internet Of Things
15	202541066759	TTS3438	Dr. David Neels Ponkumar. D	ECE	Quantum Safe Data Protection System
16	202541073762	TTS3589	Dr. Ferlin Deva Shahila	ECE	AI-Driven Voice Activated Robotic Assistant For Intelligent Command Execution
17	202541073760	TTS3620	Dr. Preethi.D	ECE	Fetal Electrocardiogram Telemonitoring System For Anomaly Detection
18	202541073764	TTS3620	Dr. Preethi.D	ECE	AI Based Handwash Monitoring Device



19	202541073761	TTS3620	Dr. Preethi.D	ECE	Personalized Care Smart Monitoring Device For Sleep Apnea Disorder
20	202541066760	TTS2198	Dr. Shiyamala. S	ECE	3.Low Cost Coconut Coir Quality Checking System Using Fpga
21	202541066762	TTS3582	Dr. Vaishnavi	ECE	Smart Transportation And Student Attendance Monitoring System With Driver Behavior Detection.
22	202541074310	TTS3589	Dr. Ferlin Deva Shahila	ECE	Iot Solar Energy Based Multipurpose Agricultural Robot For Smart Farming Monitoring System
23	202541066757	TTS3563	Dr. Nalini	ECE	Design And Implementation Of A Novel Smart Road Safety System For Accident Prevention Utilizing Heat Detection
24	202541067862	TTS2782	Dr. M. Valliammai	ECE	Estimation Of Complex Refractive Index Spectra For CRP Biomarker
25	202541080537	TTS3582	Dr. Vaishnavi	ECE	AI-Iot Enabled Smart Helmet System For Real-Time Hazard Prediction And Dynamic Scheduling.
26	202541080536	TTS3563	Dr. Nalini	ECE	Design Of An Intelligent Accident Prevention System Using Infrared Heat Sensing And Real-Time Alerts
27	202541077637	TTS2808	Dr. KALPANA DEVI. P	ECE	Utilization Of Fish Market Waste As Organic Fertilizer: A Sustainable Waste Management System
28	202541080533	TTS2198	Dr. SHIYAMALA. S	ECE	Autonomous Drone Network For Rapid Blood And Organ Transport



29	202541079937	TTS3620	Dr. Preethi D	ECE	Smart Tire Pressure Monitoring System (TPMS) With Automatic Tire Inflation
30	202541081866	TTS2781	Sambath Kumar. K	ECE	Iot-Enabled Real-Time Driver Drowsiness Detection And Alert System With Web Interface
31	202541085682	TTS1246	Dr. A. Selwin Mich Priyadharson	ECE	Design And Development Of AI, IOT And Remote Sensing Based Automated Spray For Maximizing Crop Yield
32	202541080532	TTS3582	Dr. Vaishnavi T	ECE	Title Of The Invention: AI-Integrated Smoke-To-Ink Conversion And Monitoring System For Sustainable Urban Environments
33	202541101111	TTS3547	Dr. Ashwini	ECE	Automated Root Zone Saturation And Draining Using Timed Logic Control
34	202541075857	TTS2913	Dr. Arun C.A	ECE	Universal Iot Trainer Kit
35	202541078851	TTS2913	Dr. Arun C.A	ECE	Iot Based Industrial Information Managerial System For Industry 4.0
36	202541101108	TTS3582	Dr. Vaishnavi	ECE	Smart Quiz: AI-Enabled Iot Quiz Buzzer System Using ESP32 With Real-Time Response Logging And Analytics
37	202541101109	TTS2338	Dr Suresh Ponnann	ECE	Hydronex Optimizer – A Smart Device For Real Time Water Quality Monitoring And Aquaculture Managemewnt
38	202541081867	TTS3340	Rajesh Kumar. D	ECE	Dual-Band High-Gain MIMO Antenna For Millimeter-Wave 5G Systems
39	202541117072	TTS3568	Dr Rosi	ECE	Palm-Scale Solar Charger With Smart MPPT Architecture



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40	202541119535	TTS1850	Dr. Vinson Josuaha	ECE	Occupancy-Aware Intelligent Indoor Air Quality Monitoring And Control System
41	202541119536	TTS3772	Dr. A Abinaya	ECE	Solar-Powered Iot-Enabled Adaptive Aeroponic Tower Farming System
42	202541119540	TTS3364	Dr. Koushick Venkatesh	ECE	Semi-Flexible Slot-Loaded Cpw-Fed X-Band Microstrip Antenna
43	202541122922	TTS2913	Dr. Arun C.A	ECE	Industrial-Grade ESP32-Based Programmable Logic Controller With Protected Multi-Voltage I/O Architecture
44	202541130932	TTS3340	Dr. Rajesh Kumar D	ECE	Dual-Port CPW-Fed Circularly Polarized Antenna With High Isolation For Next-Generation Iot And Wearable Systems
45	202641001509	TTS2827	Dr. Mutharasan	ECE	Eco-Safe Bio Friendly & Natural Mosquito Repellent Detergent