

MADETI PAVAN KUMAR

Main Road, Ramabhadrapuram, Vizianagaram, Andhra Pradesh – 535579

☎ 6302085024 ✉ madetipavankumar9@gmail.com [in linkedin.com/in/pavankumarmadeti](https://www.linkedin.com/in/pavankumarmadeti) github.com/Pavan-1522

Professional Summary

A dedicated and self-driven ECE student with hands-on experience in embedded systems, IoT, and electronics prototyping. Strong knowledge of microcontroller programming, PCB design, and real-time database integration. Proven leadership in organizing tech events and a solid project portfolio that blends hardware and software seamlessly.

Education

GMR Institute of Technology

Bachelor of Technology in Electronics and Communication Engineering

Expected May 2025

Rajam, Andhra Pradesh

Relevant Coursework

- Digital Electronics
- Microprocessors & Controllers
- Embedded Systems
- Analog Electronics
- C Programming
- Internet of Things (IoT)
- Signals and Systems
- Control Systems
- Python Programming

Experience

Resolute Sky Quad Electronics

Production Intern – PCB and Smartwatch Assembly

June 2023 – Nov 2023

Medchal, Hyderabad

- Participated in PCB manufacturing and assembly for Fire-Boltt smartwatches.
- Performed soldering, inspection, and testing of circuits in SMT and through-hole technologies.
- Assisted in quality assurance and documentation for ESD-compliant processes.
- Collaborated with engineers to troubleshoot faulty boards during production.

Projects

Smart Bus Pass Verification System | *ESP32, RFID, Firebase, JS*

2024

- Automated passenger validation with RFID and ESP32; real-time balance display on LCD.
- Logged transactions to Firebase and synced data with Google Sheets dashboard.

Smart Parking System | *Arduino, IR Sensors, Servo, LCD*

2023

- Designed automatic vehicle slot monitoring and gate control system.
- Displayed real-time availability on LCD and controlled entry via servo motor.

Home Automation via Cloud | *ESP32, Firebase, HTML, JS*

2023

- Developed a web-controlled smart home solution using Firebase for data sync.
- Enabled remote switching and real-time status display for home appliances.

Smart Energy Meter | *ESP32, Current Sensor, Firebase, LCD*

2023

- Built an IoT-based meter for energy monitoring and Firebase logging.
- Used current sensors to display live usage and alerts on web dashboard.

Technical Skills

Languages: C, Embedded C, Python, Java, HTML, CSS, JavaScript

Microcontrollers: Arduino, ESP32, ESP8266, AT89S52, PIC16F877A

Developer Tools: VS Code, Arduino IDE, MPLAB X IDE, Android Studio, GitHub

Technologies: Firebase (Auth, Realtime DB), Google Sheets API, Bootstrap, Linux

Electronics: Sensors, Actuators, PCB Design, Soldering, LCD, RFID, IR Modules

Leadership / Extracurricular

ISTE Student Chapter, GMRIT

Coordinator

- Led events and workshops to promote technical skills and student engagement.
- Collaborated with faculty and volunteers for large-scale tech initiatives.

2023 – Present

Rajam, Andhra Pradesh

Robotics Club, GMRIT

Club Coordinator

- Mentored students on embedded systems and robotics projects.
- Organized robotics competitions and hands-on learning sessions.

2023 – Present

Rajam, Andhra Pradesh