

RAGUL N.

Electronics & Communication Engineering Student | IoT & Web Development Focus

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CAREER OBJECTIVE

Highly motivated Electronics and Communication Engineering student seeking a challenging internship to leverage expertise in IoT, Embedded Systems, and Web Development. Focused on designing and deploying cost-efficient, scalable, and sustainable technological solutions that drive innovation and solve real-world problems.

EDUCATION

B.E. Electronics and Communication Engineering

Velalar College of Engineering and Technology, Erode **Expected May 2026**
Current CGPA: 7.9/10.0

HSC

Kongu Velalar Matriculation & Higher Secondary School **2022**

INTERNSHIPS & TRAINING

Intern (Front-End Development)

Rinex **Sep 2023 – Nov 2023**

- Improved and refined the User Interface (UI) and User Experience (UX) of internal tools by utilizing HTML, CSS, and vanilla JavaScript.
- Collaborated with the senior team to implement responsive design principles across various web pages.

Web Development Training

Codebind Technology **Dec 2024**

- Completed intensive training focused on modern web development practices and responsive design principles.
- Focused on responsive design and tested tools to create mobile-first, professional web interfaces.

TECHNICAL SKILLS

Programming: Python, Java (Foundational)

Web Development: HTML5, CSS3, JavaScript

IoT & Embedded: Arduino, ESP32, Sensor Interfacing, Cloud Integration

Database: SQL

Tools/VCS: Git, VS Code

ACHIEVEMENTS & CERTIFICATIONS

- Winner – Smart India Hackathon (SIH) 2023 (Ministry of Education, Govt. of India).
- First Place – Technovanza 2K25 (Technical paper presentation competition).
- NPTEL Certification – Data Analytics with Python (Jan–Apr 2024).

ACADEMIC PROJECTS

Smart Traffic Management System (IoT, Python, ESP32)

- Integrated vehicle detection sensors and real-time weather data to dynamically adjust signal timings, resulting in an estimated 15% reduction in vehicle idling time.
- Developed an emergency priority feature that automatically clears the path for ambulance and fire services, significantly reducing emergency response times.
- Spearheaded the use of cost-effective microcontrollers for efficient local data processing and cloud communication.

Early Decomposition of Fecal Matter (IoT, Embedded Systems, Sustainability)

- Designed and implemented an IoT system that monitors and controls environmental factors to accelerate organic waste decomposition.
- Engineered the process to yield valuable dual outputs: high-quality organic fertilizer and sustainable biogas, promoting circular economy principles.
- Utilized sensor data and cloud logging to provide continuous process optimization and predictable yield results, enhancing project scalability.

PROJECT IMPACT & SOCIETAL CONTRIBUTION

- Sustainability: Demonstrated a strong commitment to environmental welfare through projects that directly contribute to improved waste management and resource conversion.
- Urban Efficiency: Optimized urban infrastructure by implementing a Smart Traffic Control System, directly aiming to improve public service efficiency and reduce fuel consumption.

SOFT SKILLS & LANGUAGES

Soft Skills: Problem Solving, Team Collaboration, Adaptability, Leadership, Time Management.

Tamil: Fluent (Native Proficiency)

English: Intermediate (Professional Working Proficiency)

Hindi: Basic

PERSONAL DETAILS

Date of Birth: 11 November 2004

Nationality: Indian

Hobbies: Exploring technology, collaborative teamwork, multiplayer gaming.