

Adithya Ram S

B.Tech (Honours), Electronics and Communication Engineering
Indian Institute of Information Technology Sri City

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EDUCATION

•B.Tech (Honours) in Electronics and Communication Engineering - 8.29 CGPA

Indian Institute of Information Technology Sri City

2023–27

•Higher Secondary School (Class 12) — 93%

Narayana Junior College, Chennai

2021–23

EXPERIENCE

•Software Intern — Hardware Platform Solutions

Celestica India Pvt. Ltd., Chennai

May – Jul 2025

- Built automated test workflows integrating API + SSH to support hardware validation platforms.
- Improved result synchronization and diagnostics for enhanced validation throughput.
- Collaborated across hardware-software teams for system-level debugging and test refinement.

•Research Intern — Embedded Systems (Honours Project)

IIT Sri City

Jul – Aug 2025

- Designed embedded telemetry system for IoT e-cycle integrating GPS (UART), IMU (I2C), and LoRa/ESP-NOW.
- Built multi-sensor fusion logic and real-time dashboard using Firebase + Leaflet.js.
- Developed reliability-focused firmware routines for mobility analytics and CPS workflows.

PROJECTS & RESEARCH

•IoT E-Cycle — Real-Time Telemetry System

2024–25

ESP32 • GPS • IMU • LoRa • ESP-NOW

- Developed end-to-end embedded firmware for sensor acquisition and mobility analytics.

•Weather-Adaptive Skid Risk Assessment (CPS)

2025

IMU fusion • embedded ML inference

- Developing embedded sensor-fusion algorithms for skid prediction using IMU + wheel dynamics.

•DAC Quantization Analysis for Quantum Control

2025

LTS defense • Monte Carlo • Qiskit

- Simulated mixed-signal DAC behavior and performed fidelity modelling using hybrid Qiskit analysis.

•Smart Street Light using LoRa

2024

Adaptive dimming • IoT protocol design

- Designed LoRa-based command/response protocol and implemented AC dimming for smart lighting.

TECHNICAL SKILLS

Programming: C, C++, Embedded C, Python, Verilog HDL

Microcontrollers & SBCs: ESP32, ESP8266, PIC, 8051, Raspberry Pi

Interfaces: UART, I2C, SPI, PWM, ADC, GPIO

Tools: Logic Analyzer, Oscilloscope, LTS defense, Vivado, Git, PlatformIO, Firebase, Leaflet.js

Domains: Embedded Systems, CPS, IoT Telemetry, Sensor Fusion, Edge Computing, Mixed-Signal Simulation, Pattern Recognition

POSITIONS OF RESPONSIBILITY

•Club Lead NexSync Smart Mobility Club — IIIT Sri City

2025 – Present

•Co-Lead — Marketing Team IIIT Sri City

2024 – 2025

CERTIFICATIONS

•Verilog HDL Masterclass Udemy

•IoT & Autonomous Systems IEEE ITSS

•ESP32 IoT Internship COGTIS Technologies

•Marketing Co-Lead Recognition IIIT Sri City