RITHIK V E

Career Objective

Aspiring Engineer with a background in Robotics and Automation, skilled in Python, C, ReactJS, Node.js, MySQL, and Fusion 360. I have experience building predictive maintenance systems and smart industrial dashboards using sensor data and machine learning. I am passionate about using technology to improve industrial processes and boost efficiency.

Technical Skills

Programming: Python, C

Embedded Systems: Sensor Interfacing,

Microcontrollers

Frontend: ReactJS, Flutter

Backend: Node.js Database: MySQL

Tools: Git & GitHub, Cisco Packet Tracer,

Postman, Fusion360, NI myDAQ, RobotStudio,

REST APIs, Postman

Networking: TCP/IP, Ethernet, CCNA Protocols

Certifications

- CCNA: Introduction to Networks, Cisco Networking Academy program
- CCNA: Switching, Routing, and Wireless Essentials, Cisco Networking Academy program
- CCNA: Enterprise Networking, Security, and Automation, Cisco Networking Academy program
- Python Essentials 1, Cisco Networking Academy program
- Python Essentials 2, Cisco Networking Academy program
- Introduction to Cybersecurity, Cisco Networking Academy program

Internships

SRM Directorate of Research (Current)

Developing IoT and AI solutions to enhance manufacturing processes and build advanced automation prototypes.

MastrLinque Automation (SPM)

Implemented automation workflows for industrial robotics, integrating sensors and control systems for improved efficiency.

Projects

HVAC Dashboard (Real-time Monitoring)

Real-time HVAC monitoring system with Node.js backend and ReactJS frontend, implemented alerts and control features for efficient energy management.

Predictive Maintenance over Ethernet

Collected screwdriver data (MySQL) and vibration sensor data (Feather files), applied Python ML for anomaly detection and failure prediction with a ReactJS dashboard.

Smart Irrigation System (147-Day Schedule)

IoT-based system with Flutter frontend and Node.js backend, automated irrigation based on soil moisture and a 147-day schedule for optimized water usage.

YOLO-based Weed Detection

YOLOv8 model for real-time weed classification in video streams, integrated results into a database for analysis and reporting.

Education

B.E. in Robotics and Automation

Easwari Engineering College, 2022 – 2026 CGPA: 8.02

HSC (Computer Science)

 $\rm G.G.S.M.M.$ Hr. Sec. School, 2022 82.33%

SSLC

G.G.S.M.M. Hr. Sec. School, 2020 72.66%