# Rohith A

#### **Electronics and Communication Engineering**



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Final-year Electronics and Communication Engineering student skilled in Embedded Systems, IoT, and Machine Learning. Built intelligent systems using ESP32, REST APIs, and TensorFlow. Proficient in hardware-software integration with LTSpice, Arduino IDE, and VS Code.

#### **Education**

Degree	Institute	Board/University	CGPA/Percentage	Year
B. Tech ECE	NSS College of Engineering	APJKTU	8.39(Till 5 <sup>th</sup> sem)	2022-2026
Class 12 <sup>th</sup>	PMG HSS Palakkad	Kerala State Board	98%	2021
Class 10 <sup>th</sup>	Bharathamatha HSS Palakkad	Kerala State Board	95%	2019

### **Work Experience**

Internship Apr 2025 - May 2025

Edunet Foundation | Remote

In a Foundations of AI internship, I mastered AI/ML/DL fundamentals—data preprocessing, exploratory analysis, supervised/unsupervised learning, tuning, and evaluation—and applied them in a capstone project by ingesting data and deploying ML models via a Flask API.

## **Projects**

**Book Vending Machine** 

Feb 2025 - Apr 2025

Mini project

Developed a smart book vending system with an ESP32 microcontroller, a stepper- motor driven cylindrical book holder (MG996R) and a servo-powered dispensing arm (MG90S), integrated RFID (RC522) for user authentication, and Firebase-backed web dashboard for live monitoring of book issues and returns.

# **LaptopFinder Pro – ML-Driven Laptop Recommendation System**

Apr 2025 - May 2025

Activity project

Built an end-to-end recommender using Python and BeautifulSoup to scrape Amazon/Flipkart, MongoDB Atlas for storage, scikitlearn KMeans and PCA for use-case clustering, and a Flask API powering a dynamic JavaScript frontend displaying images, links, specs, and short descriptions.

#### Core Skills

Embedded Systems & IoT: ESP32, ESP8266, Arduino IDE, Sensor Integration

**Programming:** Python, C/C++

Cloud & API Integration: MongoDB Atlas, Firebase, REST API, Postman

Tools & Platforms: MongoDB Compass, VS Code, GitHub, Proteus

Machine Learning: Foundational Concepts, Data Processing, Problem-Solving, Debugging, Rapid Prototyping, Collaborative Learning

## **Community Work**

Volunteer May 2023 - Present

National Service Scheme

# Certificates

Programming, Data Structures and Algorithms using Python, NPTEL Machine Learning with Python, freeCodeCamp

Mar 2024 Jan 2025

### **Interests**

Machine Learning & Data Engineering, Real-Time Systems & Embedded Computing