

Frank Mathew Sajan

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EDUCATION

Vellore Institute of Technology

Bachelor of Technology in Computer Science, Specialization in AI/ML

Amaravati, India

Sept. 2023 – Jul. 2027

CGPA: 8.62 / 10.00

Coursework: Data Structures & Algorithms, OOP (Java/C++), DBMS (Normalization), OS (Concurrency)

EXPERIENCE

Founding Engineer & Product Lead

Aug 2025 – Present

House of Muziris (D2C Startup) | [Live Link](#)

Kerala, India

- Architecting the full-stack MVP using **React, Django, and PostgreSQL**, collaborating with stakeholders to **determine user requirements** for FSSAI compliance and supply chain logistics.
- Designed a scalable schema to manage inventory, improving system **efficiency** and preventing stock mismatches.
- Developed a high-availability waitlist system to handle traffic spikes, ensuring platform **reliability** during marketing campaigns.

Software Engineering Intern

Jun 2025 – Jul 2025

TechtoGreen Drone & Robotics Pvt. Ltd. (IIEC Incubator) | [Case Study](#)

Vijayawada, India

- Applied engineering principles to build a mobile interface using **React Native (Expo)** for autonomous drone control, optimizing field coverage by 30%.
- Deployed a Deep Learning anomaly detection model on **AWS EC2**, implementing **observability** via RESTful APIs.
- Engineered a fault-tolerant communication module using **LoRa**, achieving 99% Packet Delivery Ratio (PDR) during field trials via LoRa retry-logic.

Deputy Captain - Technical Research

Sep 2023 – Present

IETE VIT-AP (Student Chapter)

Amaravati, India

- Leading a cooperative team environment of 20+ student developers, providing technical guidance on **Embedded Systems (C++)** and Verilog projects.
- Reviewing current developments in IoT to drive consistency in student projects and foster a culture of technical excellence.

PROJECTS

NASA Space Apps Challenge (Global Nominee) | React, Satellite Data API, AI

Oct 2024

- Selected as a **Global Nominee (Top 1% of 93,000+ participants)** for demonstrating **creative engineering** in developing an AI-driven educational tool utilizing PACE satellite data.
- Built a responsive frontend visualization to simplify complex oceanographic data, prioritizing user experience and rapid prototyping under strict hackathon time constraints.

Rural School Management System | React, Supabase (PostgreSQL), AWS

Aug 2025 – Nov 2025

- Deployed a digital management system for a rural school, digitizing records for 500+ students and **reducing manual data entry time by 15 hours/week**.
- Optimized **PostgreSQL** database queries, cutting page load times by 35% on low-bandwidth networks.

CERTIFICATIONS & AWARDS

Cloud/AI: AWS Academy Graduate (Cloud Architecting), Oracle GenAI Certified Professional (2025)

Code: CS50P: Programming with Python (Harvard, 2024), Automation Anywhere Essentials (2025)

Leadership: McKinsey.org Forward Program (Problem Solving & Leadership, 2025)

Awards: Rajya Puraskar (State Award, Bharat Scouts & Guides) – Highest State Honor for Discipline.

TECHNICAL SKILLS

Core Concepts: Data Structures & Algorithms, System Design, OOP, Database Normalization

Languages: Python, C++, Java, JavaScript (ES6+), SQL, HTML/CSS

Frameworks: React.js, React Native (Expo), Django, FastAPI, REST APIs, RAG (GenAI)

Tools & Cloud: Git/GitHub, AWS (EC2, S3), Docker, Supabase, Linux/Bash, VS Code