

Sairam Mekala

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Bachelor of Technology (B.Tech)
Computer Science and Engineering
Keshav Memorial Institute of Technology

 [LinkedIn Profile](#)

 [GitHub Profile](#)

EDUCATION

Keshav Memorial Institute of Technology

B.Tech, Computer Science and Engineering

2027

CGPA: 8.19

EXPERIENCE

DBS Tech

Technology Apprentice

Jun 2026 – Present

- Selected from 800 applicants for an 8-month apprenticeship in DBS's engineering organisation, working on enterprise backend systems in a regulated banking environment.
- Building production-pattern REST services in Java and Spring Boot – layered architecture, dependency injection, Maven builds, and JDBC/JPA persistence against relational databases.
- Writing and optimising SQL across joins, aggregations, and indexed lookups; shipping work through Git-based code review and iterative Agile delivery cycles.

Sathvani Pvt Ltd

Co-founder

Sep 2025 – Present

- Lead technical direction for an assistive speech-synthesis device, owning the end-to-end architecture from multi-sensor embedded acquisition (STM32, ESP32) to a cloud inference pipeline on GCP.
- Filed a provisional patent for the underlying sensing and speech-reconstruction method; manage the technical specification and IP process with external counsel.

PROJECTS

CHATPILOT

Real-Time Networked Control System on Linux  [Code](#)

Jun 2025 – Nov 2025

- Built a real-time control system in Python on Linux, coordinating concurrent command, telemetry, and navigation streams between a client application and an on-board controller over a lossy network link.
- Implemented an MQTT-based messaging layer with topic-level separation for movement, navigation, and status, sustaining sub 200ms command latency across 4 concurrent streams.
- Debugged low-level device integration on Linux – serial/UART communication, device-port enumeration, and driver-level faults across Pixhawk, DDSM motor controllers, and RPLidar; implemented A* planning over LIDAR-derived occupancy data.
- **Tech Stack:** Python, Linux, MQTT, UART/Serial, A*, DroneKit, RPLidar, Pixhawk

ARCHON

Internal Operations and Team Productivity Platform  [Code](#)

Jul 2026 – Aug 2026

- Built and deployed a full-stack internal operations platform managing tasks, daily targets, meetings, and calendars for 120 users across three distinct roles.
- Implemented authentication and row-level role-based access control over PostgreSQL, enforcing separate data visibility for employees, managers, and administrators.
- **Tech Stack:** React, JavaScript, PostgreSQL (Supabase), REST APIs, Git, Vercel

TECHNICAL SKILLS

Languages: Python, C, C++, Java, JavaScript, SQL, Bash

Core CS: Data Structures & Algorithms, Operating Systems, Computer Networks, DBMS, Multithreading & Concurrency, Object-Oriented Design

Backend & Databases: FastAPI, Spring Boot, Flask, REST APIs, React, PostgreSQL, MySQL, SQLite

AI Engineering: LLM API integration, prompt design, structured output parsing, Model Context Protocol (MCP)

Tools & Platforms: Linux, Git, GitHub, Docker, CI/CD, Postman

ACHIEVEMENTS

- Placed 5th out of 120 teams at Megathon'25, IIIT Hyderabad.

Oct 2025

- Placed 2nd out of 130 teams at Demux 2.0, BVRIT; 1st in the Bot Builders (IoT) stream.

Sept 2025