

# A SAI MOULI

Bengaluru, Karnataka

☎ +91-8919554720 ✉ [saimouli12345678@gmail.com](mailto:saimouli12345678@gmail.com) 🔗 [linkedin.com/in/saimouli036](https://www.linkedin.com/in/saimouli036) 🌐 <https://github.com/SaiMouli3>

*Backend & GenAI Engineer · RAG Systems, AI Agents & LLM Pipelines .*

## EDUCATION

**Ramaiah Institute of Technology, Bengaluru**

**2021 – 2025**

*B.Tech - Computer Science and Engineering - CGPA - 9.06*

*Bengaluru, Karnataka*

## EXPERIENCE

**Software Engineer** | NatWest, Bengaluru, India

**July 2024 - Present**

- Built a Retrieval-Augmented Generation (RAG) system over a backend database with 136 tables that accurately interprets user queries, generates and validates SQL, executes it, and returns correct answers with visualized graphs.
- Developed an AI-powered chatbot for an analytics dashboard used by internal stakeholders, enabling natural-language querying of live business data and cutting analyst dependency on engineering for ad-hoc reports.
- Optimized backend APIs and data processing workflows, reducing dashboard response time from 3 minutes to under 30 seconds for large-scale data queries.

**Software Development Intern** | Pods Studio, Bengaluru, India

**Sept 2023 - Nov 2023**

- Built 43 REST APIs in FastAPI/Django powering core app features — user auth, data validation, and third-party integrations — serving 20,000 active users.
- Automated personalized email communication workflows using event-driven triggers (Celery + cron), reducing manual outreach effort and improving user retention by 27%.

**Backend Developer Intern** | Aamara Technologies, Bengaluru, India

- Built a full-stack HR management system for Techno Rings (20,000+ machinery and employee records) using Django + React, reducing manual processing time from 4 hrs/day to under 30 minutes — a 87% reduction.
- Implemented scalable backend modules for attendance tracking, payroll calculation, and equipment management using Django and MySQL; exposed via REST APIs consumed by a React frontend.

## TECHNICAL SKILLS

**Programming Languages:** Python, C++, SQL

**Backend Engineering:** FastAPI, Flask, Django, REST APIs, Microservices Architecture, WebSockets

**AI & GenAI Engineering:** LLMs, LangChain, LangGraph, RAG Pipelines, AI Agents, MCP Servers, Conversational AI, Vector Databases

**Databases:** PostgreSQL, MySQL, Redis

**Cloud & DevOps:** AWS (EC2, S3, Lambda, RDS), Docker, CI/CD Pipelines

**Version Control & Tools:** Git, GitHub, Linux

## PROJECTS

**AI-Powered Autonomous Debugging Agent** | FastAPI, LangGraph, AWS, RAG | 🌐 [GitHub](#)

- Built an autonomous debugging agent that monitors application logs, analyzes stack traces, identifies affected source files, and generates contextual code fixes using LLMs and Retrieval-Augmented Generation (RAG).
- Designed a multi-step debugging workflow using LangGraph to trace errors, analyze root causes, retrieve relevant code context, and generate actionable fix suggestions.

**Real-Time Market Analysis Agent** | Python, FastAPI, MCP, Langchain

- Built an MCP server exposing live NSE/BSE market data, watchlists, and stock analytics as LLM-callable tools, enabling natural-language access through MCP-compatible AI clients.
- Developed a LangGraph-based analysis agent that computes RSI, SMA, and VWAP on live market data and combines RAG over financial news to generate grounded buy/hold/sell insights with automated alerts and email digests.