Gourisankar G

Github | in Linkedin | ⊕ Myportfolio | ≥ Email | → Phone

Professional Experience

Deloitte USI - Gen AI Developer

Hyderabad, India — 2024 - Present

- Designed and deployed an enterprise-grade RAG-based resume search system using LangChain, OpenAI's GPT-4, and AWS cloud services.
- Developed a modular FastAPI backend, integrating with Ollama initially and later upgraded to LangChain-powered GPT-4 for more robust LLM responses.
- Reduced LLM response latency and improved retrieval accuracy by optimizing prompt templates and refining retrieval queries for context-aware search.
- Deployed the solution on AWS using S3 (storage), OpenSearch (vector similarity search), and IAM (secure authentication and access control).
- Built intelligent ingestion logic to embed only new resumes not already indexed in OpenSearch, saving compute and storage overhead.
- Migrated backend database support from SQLite to SQL Server and refactored API logic to enable seamless CRUD operations.
- Validated all API endpoints using Postman and implemented robust error handling and input validation for production readiness.
- Created and maintained Python automation scripts for internal tools and data profiling tasks.
- Conducted knowledge transfer sessions and architectural walkthroughs on LangChain RAG components within the team.

TECHNICAL SKILLS

Languages Python, SQL

Frameworks LangChain, FastAPI

Libraries Hugging Face Transformers, Pandas

Large Language Models GPT-4 (OpenAI), Ollama

ML/NLP Retrieval-Augmented Generation (RAG), Prompt Engineering, Embedding

Models

Cloud AWS (S3, IAM, OpenSearch)

Databases SQL Server, SQLite
Tools Postman, Git, VS Code

EDUCATION

2020 - 2023 BCA at Santhigiri College of Computer Sciences (GPA: 7.92/10)

2025 - 2027 MCA-Data Science at Jain (Deemed-to-be University)

Projects

Go Mech GitHub Link

It is a mobile application developed on the Ionic Framework that helps users find nearby mechanic shops (if registered) to access mechanic services for their vehicles.

The OP Booking System is an exclusive website developed for a single hospital, offering streamlined online appointments and efficient access to doctors. This tailored solution is designed to optimize communication and reduce administrative burdens within the hospital environment.

CERTIFICATIONS

Databricks Certified Data Engineer Professional (verify credential) Jan 2025 Databricks Certified Data Engineer Associate (verify credential) Dec 2024

PUBLICATIONS

Gourisankar G, Gayathri Manjesh and Sebastian Cyriac (Mar. 2023). "Internet of Things in Road Safety". In: *International Conference on Advanced Computing and Communication Technology-2023*. Vol. 8. 3. IJSDR, p. 1332. URL: https://www.ijsdr.org/papers/IJSDR2303219.pdf.