Sourabh Asharma

Software Development Engineer
sourabhasharma15@gmail.com · +91 6263002939

[LinkedIn](#) · [GitHub](#) · [Leetcode](#)

Summary

Backend Software Development Engineer with experience in cloud solutions using Azure and GCP. Expertise in developing scalable solutions with an emphasis on security, performance, and continuous deployment.

Work Experience

Software Development Engineer
Company: Genpact, Bengaluru   *Jan 2023 - Present*

- **Chat & RAG Systems:** Built generative AI chat applications and Retrieval-Augmented Generation (RAG) systems for scalable multi-tenant architectures, with secure authentication and RBAC implemented using Okta, Azure AD.
- **AI Agentic System:** Developed AI-driven agentic systems featuring a central 'Master Agent' that dynamically orchestrates workflows by selecting specialized sub-agents based on user input. Each agent was equipped with domain-specific tools (APIs, LLMs, data processors) to handle complex, multi-step tasks in real time. A dedicated microservice for agentic tools using gRPC was built to reduce backend workload and improve system efficiency.
- **High-Performance Task Processing:** Implemented a distributed task queue using Celery to handle CPU-intensive operations. Decoupling synchronous API requests from background processing reduced backend load by 40%, improved response times by 60%, and enabled horizontal scaling of worker nodes.
- **Observability:** Integrated OpenTelemetry with Azure Application Insights for centralized logging, distributed tracing, and real-time monitoring, cutting issue resolution time by 30% and accelerating development cycles.
- **Automated Cloud Infrastructure:** Used Terraform and Azure DevOps to implement IaC and CI/CD pipelines, automating cloud provisioning, reducing manual errors by 70%, and ensuring reliable deployments via state versioning.
- **ML Pipeline:** Experience in end-to-end AI/ML model deployment pipeline using the Vertex AI platform (GCP), with model monitoring, alerts, and batch processing pipeline.
- **LLM Evaluation:** Explored large language models (LLMs) Evaluation tool like Chakra, Trulens, and Tevals to evaluate application performance and driving 15% higher client satisfaction.

Software Development Intern
Company: Layer3Org, Remote - [Link](#)   *Dec 2021 - Mar 2022*

- Contributed as a frontend developer to build an NFT launchpad platform from scratch (React) enabling clients to mint, manage, and list NFTs on Ethereum-compatible blockchains.
- Contributed to the SpiritSwap(DeFi DEX) platform by creating and debugging React-based frontend components.

Skills

- **Programming Language:** Python, Java, JavaScript
- **Application Framework:** FastAPI, Flask, NodeJS, ReactJS, Langchain, Celery
- **Databases:** PostgreSQL, MySQL, Azure AI Search Vector DB, GCP Vector DB, Redis
- **Cloud :** Microsoft Azure , Google Cloud Platform (GCP)
- **Others:** Terraform, Docker, opentelemetry, Generative AI, gRPC, Azure API Gateway, Azure private networks,

Projects

GeneWeb | [Link](#)

- GeneWeb integrates the NCBI search engine with EBI tools, where user can search and download the protein or DNA sequence. Also can use EBI tool to understand the underlying pattern in the sequences. Implemented Oauth2 through Firebase authentication (Google and custom) with email verification and password reset.
  Technologies: Node.js, react.js, Firebase, MUI, NCBI and EBI APIs

Achievements

Machine Learning-Based Breast Cancer Detection   [Link: IEEE Research Paper](#)

- Explored multiple machine learning algorithms and compared them for breast cancer detection with higher accuracy. Published in IEEE

Solved **550+ DSA problems in Leetcode**, strengthening algorithmic problem solving skills.

Education

NIIT University (NU), Neemrana, Rajasthan   *June 2019 - June 2023*
Bachelor of Technology, Computer Science

- Student Academic Committee, CGPA: 9.35