Amit Joshi

AWS | Terraform | CI/CD | Docker | GenAI | LLM | Python

Contact

- **Email**: one.amitj@gmail.com
- **GitHub**: github.com/oneamitj
- **Portfolio**: https://amitj.com.np/

Professional Summary

Solution Architect specializing in the intersection of High-Scale Cloud Infrastructure and GenAI with deep expertise in AWS. Proven record of architecting LLM and GenAI systems, serverless multi-tenant platforms, and automated CI/CD pipelines. Proven track record of modernizing legacy systems, optimizing costs, scaling services to hundreds of thousands of users, and leading cross-functional teams across multiple countries. Strong focus on reliability, compliance, and operational excellence in enterprise and consumer-facing applications.

Core Skills

- **Cloud Platforms**: AWS (Expert), GCP, Azure, DigitalOcean
- **DevOps Tools**: Terraform, CloudFormation, Pulumi, Docker, Kubernetes, GitHub Actions, Azure DevOps
- **GenAI/Large Language Model (LLM)**: OpenAI GPT, Anthropic Claude, Azure AI, AWS Bedrock, Retrieval-Augmented Generation (RAG), Prompt Engineering
- **AI Tools:** Azure Document Intelligence, Amazon Textract, Pinecone, AWS OpenSearch VectorDB, AWS S3 Vector, LangChain, LangSmith, RAGAS, RAGChecker
- **Programming Languages**: Python, Bash, Go, NodeJS
- **Monitoring & Security**: ELK, OpenSearch, Vanta, Drata, Wazau, CloudFlare, Certbot, OWASP
- **Database:** MySQL, PostgreSQL, DynamoDB, MongoDB, Redis
- **Other Technologies**: Linux, Windows, Nginx, Apache, HAProxy, Envoy Proxy, Kafka, Jenkins, Ansible
- **Compliance**: HIPAA, SOC2, GDPR, PCI-DSS

Professional Experience

Leapfrog Technology Inc.

Seattle, Washington, United States

Solution Architect, DevOps
Dec 2023 – Present

- **Organizational Leadership & AWS Strategy:** Spearheaded the technical initiative to

secure **[AWS Generative AI Competency](#)** and Amazon Partner Network Advanced membership, positioning the firm as a premier GenAI service provider.

- **Enterprise GenAI Orchestration:** Architected and deployed 10+ production-level LLM and GenAI solutions, focusing on optimized RAG architectures and prompt engineering to solve complex business challenges.
- **Scalable Multi-Tenant Architecture:** Designed a **HIPAA-compliant**, multi-tenant serverless ecosystem, implementing rigorous data isolation protocols and streamlined onboarding for rapid tenant scaling.
- **Performance & Cost Engineering:** Delivered a **50% reduction in operational costs** and a **40% improvement in product performance** through strategic model selection, token optimization, and serverless efficiency.
- **High-Throughput Data Processing:** Re-engineered document processing pipelines to scale throughput by **10x**(processing 1000+ pages vs. 100+), utilizing multicloud AI services from AWS and Azure.
- **Product Modernization:** Redesigned legacy EdTech products into automated, AI-driven systems, significantly reducing manual overhead through LLM integration.
- **[Addy AI](#)** (a Leapfrog Technology Inc. venture)
  - Architected a Large Language Model (LLM) based solution to automate U.S. healthcare provider back-office referral workflows, improving efficiency and accuracy.
  - Led a diverse, cross-functional team spanning multiple countries and disciplines to deliver the solution end-to-end.
  - Designed and implemented a fully serverless AWS architecture enabling near real-time processing with optimized cost and scalability.

Principal Engineer, DevOps
Dec 2021 – Dec 2023

- Engineered multi-stage deployment architectures for diverse client projects.
- Scaled and stabilized the DevOps team from 5 to 25+ members, strengthening capabilities and role alignment.
- Increased supported data sources by 5x, expanding from 8 to 40+ external integrations.
- Streamlined CI/CD pipelines, increasing deployment frequency by 4x (monthly to weekly).
- Led compliance initiatives for HIPAA, SOC 2, and related regulatory standards.
- Re-architected an ETL pipeline from batch-based to near real-time processing.

Lead Engineer, DevOps
Dec 2020 – Dec 2021

- Delivered DevOps solutions ensuring high availability and minimal downtime.
- Reduced deployment time by 20% for a microservices-based product.
- Accelerated new service onboarding by over ~90%.
- Built a hybrid cloud setup with seamless in-house database integration.
- Optimized an AWS-based product, reducing infrastructure costs by 30%.
- Automated CI/CD pipelines for a microservices architecture.
- Established company-wide documentation standards for DevOps processes.

Programiz.com
Kathmandu, Nepal

DevOps Engineer Consultant

Sep 2022 – Mar 2025

- Modernized and re-architected the decade-old Programiz.com deployment to achieve high availability, improved reliability, and high observability.
- Stabilized the GKE-based (GCP Kubernetes) infrastructure for the [Programiz Online Compiler](), achieving near-zero downtime; engineered a secure custom sandboxing solution for safer code execution, reduced infrastructure costs by 50%, and scaled to support 10+ compilers serving 150K+ concurrent users and 10M+ monthly users.
- Partnered closely with the Security team to identify, remediate, and proactively mitigate vulnerabilities across both the primary website and the online compiler platform.

Hamro Patro, Inc.
Kathmandu, Nepal

Engineering Manager
Jul 2020 – Dec 2020

- Led the engineering team to build and launch products within the HamroPatro app.
- Designed the system architecture for cross-border mobile recharge and money transfer services.
- Scaled the engineering team in both headcount and technical expertise.

Research Engineer/Sr. Research Engineer/Team Lead
Jul 2017 – Jun 2020

- Built HamroStack, an in-house deployment platform, to migrate from GCP App Engine to a multi-region, self-managed infrastructure while maintaining similar feature set and reliability at significantly reduced costs.
- Led R&D initiatives for blockchain-based solutions across Bitcoin, Ethereum, and Hyperledger platforms.
- Implemented server monitoring and observability systems using Prometheus and Grafana.

Javra Software Pvt. Ltd.
Kathmandu, Nepal

Software Engineer
May 2016 – June 2017

Education

- **Bachelor of Engineering in Computer Science**
  Kathmandu University, 2015

References and recommendations can be provided upon request.