GANDHAMATHAN V

Chennai, India — gandhamathanv@gmail.com — +91-9442797912
linkedin.com/in/gandhamathanv — github.com/gandhamathanv

SUMMARY

Software Engineer with 3+ years of experience designing and building scalable AI-powered, cloud-native platforms using Python, FastAPI, React, AWS, and Docker. Hands-on experience developing production-ready Generative AI applications, LLM workflows, real-time voice AI systems, and intelligent automation solutions. Skilled in AI platform engineering, cloud infrastructure, CI/CD, infrastructure as code, observability, security, and operational reliability. Google Cloud Certified Professional Cloud Architect, Associate Cloud Engineer, and Generative AI Leader, passionate about building enterprise-grade AI platforms that are scalable, secure, and cost-efficient.

EXPERIENCE

Software Engineer June 2025 – Present
HCL GUVI, Chennai

- Designed and maintained scalable AI-powered cloud-native platforms, focusing on platform reliability, operational excellence, and secure enterprise deployments.
- Led architecture discussions, code reviews, and mentored engineers, driving engineering best practices across cloud, DevOps, and AI application development.
- Built and maintained CI/CD pipelines, infrastructure automation, monitoring, and observability using Docker, CloudFormation, Grafana, and Prometheus.
- Collaborated with cross-functional teams to define technical roadmaps and deliver scalable backend systems supporting AI-native applications.
- Managed cloud infrastructure on AWS, ensuring high availability, security, scalability, and cost optimization across production environments.

Software Associate Developer June 2024 – May 2025
HCL GUVI, Chennai

- Developed scalable backend services using Python FastAPI and React for cloud-native applications deployed on AWS.
- Built production-ready Generative AI features by integrating Large Language Models (LLMs), enabling intelligent automation, conversational AI, and AI-assisted user experiences.
- Designed REST APIs and optimized backend performance through caching strategies, asynchronous processing, and database optimizations.
- Designed and implemented CI/CD pipelines using AWS CodePipeline, CodeBuild, and CodeDeploy, improving deployment reliability and release efficiency.
- Managed AWS services including EC2, ECS, ECR, S3, IAM, VPC, Load Balancers, and CloudFormation for scalable and secure deployments.

Associate Software Developer Aug 2022 – May 2023
Rooster Technologies

- Developed responsive full-stack web applications using the MERN stack, contributing to both frontend and backend development.
- Built and integrated RESTful APIs with third-party services to deliver scalable and maintainable application features.
- Participated in the complete software development lifecycle, including requirement analysis, development, testing, debugging, and deployment.
- Performed bug fixing, code refactoring, and performance optimization to improve application stability and user experience.
- Collaborated with cross-functional teams using Git-based workflows, participated in code reviews, and delivered features within project timelines.

PROJECTS

AI Interview Assistant (Real-Time Voice AI System)

- Built real-time conversational AI system with sub-second latency using LiveKit.
- Designed end-to-end pipeline (STT → LLM → TTS) integrating Gemini, ElevenLabs, and Sarvam AI.
- Engineered fault-tolerant multi-service architecture handling concurrent sessions.
- Optimized system for low-latency streaming and high availability.

CloudOps – Interactive Linux Platform

- Developed browser-based Linux terminal using containerized Docker environments.

- Architected scalable AWS infrastructure with load balancing and network isolation (VPC).
- Automated infrastructure provisioning using CloudFormation, reducing manual setup effort.

Distributed Video Conferencing (Jitsi)

- Deployed horizontally scalable conferencing system with load balancing and auto-scaling.
- Implemented monitoring and alerting for system reliability.

Secure OpenVPN Infrastructure

- Designed secure VPN infrastructure with authentication and encrypted communication.
- Ensured high availability and system reliability through monitoring and redundancy.

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, TypeScript, Golang, PHP

AI & Generative AI: Google Gemini, OpenAI, Claude, Deepgram, ElevenLabs, Sarvam AI, Prompt Engineering, LLM Workflows, AI Voice Agents, AI Evaluation, Function Calling, MCP (Model Context Protocol)

Backend Development: FastAPI, Flask, Django, Node.js, ExpressJS, REST APIs, WebSockets

Frontend Development: React, Next.js, Qwik, Webpack, Vite, React Native

Cloud Platforms: AWS (EC2, ECS, ECR, S3, Lambda, IAM, VPC, ALB, CloudFormation, SES, SNS), Google Cloud Platform

DevOps & Platform Engineering: Docker, GitHub Actions, AWS CodePipeline, CodeBuild, CodeDeploy, Linux, Ubuntu, Nginx, Grafana, Prometheus, Infrastructure as Code (IaC), CI/CD

Databases: MySQL, MongoDB, Redis

Core Concepts: AI Platform Engineering, Cloud-Native Architecture, Distributed Systems, LLMOps, Observability, Scalability, Security, System Design, Performance Optimization, Infrastructure Automation

AWARDS

- **Innovation Catalyst Award** Jun 2026
  HCL GUVI
  Awarded for excellence in Software Development, innovation, and impactful solution delivery. Recognized for building scalable applications and driving contributions across AI Engineering, Generative AI, Cloud Engineering, DevOps, CI/CD Automation, AWS, and modern software architecture.
- **Exceptional Individual Contributor** Mar 2024
  GUVI Geek Networks, IITM Research Park
  Recognized for exceptional commitment to GUVI's vision, mission, and values, with significant individual contributions during January–March 2024.
- **Special Category Award** Aug 2023
  GUVI Geek Networks, IITM Research Park
  Received for outstanding contributions as a Software Associate Developer Intern, recognizing dedication, ownership, and impact in achieving key organizational milestones.

CERTIFICATIONS

- Google Cloud Certified – Professional Cloud Architect (PCA)
- Google Cloud Certified – Associate Cloud Engineer (ACE)
- Google Cloud Certified – Generative AI Leader

EDUCATION

B.E Computer Science Engineering 2020 – 2024
Kongu Engineering College
Score: 82%

ADDITIONAL INFORMATION

- Strong problem-solving skills with focus on Data Structures and Algorithms.
- Experience debugging complex distributed systems and production issues.
- Passionate about building scalable, reliable, and high-performance systems.