

Akhil Deshneni

+918790340122 | deshneni.akhil@gmail.com | [linkedin.com/in/deshneni-akhil](https://www.linkedin.com/in/deshneni-akhil) | github.com/deshneni-akhil

SUMMARY

My approach as a software engineer is to architect 0-to-1 solutions designed for performance and scale. Using Java and Python, I apply strategic design and algorithmic thinking to build cost-efficient, data-intensive systems. I own complex challenges end-to-end, delivering backend services that are robust and reliable at massive scale.

SKILLS

- **Programming Languages:** Java, Python, JavaScript/TypeScript, C#
- **Frameworks & Libraries:** Spring Boot, Hibernate, FastAPI, Django, GraphQL, React, Cursor, GitHub Copilot, LangGraph, CrewAI
- **Cloud & DevOps:** Azure (Azure Functions, AKS), AWS (Lambda, EKS), Kubernetes, Docker, Terraform, CI/CD
- **Databases & Data Engineering:** MySQL, PostgreSQL, MongoDB, CosmosDB, Redis, Apache Kafka, Apache Spark

EXPERIENCE

California State University, Long Beach

Jun 2024 - Aug 2025

Software Developer II

California State University, Long Beach

- Reduced call volume by **70%** (**500+** CS hours saved) per month for student financial services by engineering an agentic voice bot. Saved **\$50k** annually in **operational overhead** by designing a **low-cost** agentic rag system using pipecat and daily.
- **Improved system resilience** by re-architecting a legacy system into an **asynchronous microservices architecture** using **Azure Functions, Redis, and queues**. Boosted **service availability**, cut **response time by 70%**, and reduced **operational toil**.
- Saved 100+ staff hours by engineering an event-driven, scalable commencement SMS chatbot that assisted over 5000 users.
- Boosted support staff productivity by 45% by architecting and deploying a self-service video support portal integrated with Microsoft Teams, facilitating instant communication between support staff and campus community.
- Designed and deployed a **highly available**, fault-tolerant Kubernetes platform from bare metal, **defining the reliability posture** for containerized applications. Managed the entire lifecycle from OS configuration to CI/CD integration, ensuring **scalability** and **disaster recovery** capabilities

Amazon Web Services (AWS)

Apr 2021 - Dec 2022

Serverless Cloud Engineer

- Enhanced **observability** and led incident response for Tier-1 customers, conducting deep root cause analysis on **telemetry, logs, and metrics** for **600+** high-severity incidents. Drove **long-term reliability** by contributing to architectural improvements.
- Led the development of **core Java-based** backend tooling for AWS Premium Support, reducing ticket resolution time by **16%** by architecting a scalable solution using Java and AWS **Lambda**.
- As a VOTE (Voice of The Engineer), improved team onboarding efficiency by mentoring 10+ junior engineers, creating technical documentation, and leading weekly knowledge-sharing sessions.
- Specialized in Serverless services, built reusable cloud-native workflows that enabled customers to test applications rapidly.

Techsophy

Jan 2020 - Apr 2021

Associate Software Engineer

- Cut document search latency by optimizing the underlying algorithm (from $O(n)$ to $O(\log n)$) and integrating a CDN for caching.
- Improved Nearest Visa center API response time by 60% by redesigning the database schema and implementing a Redis cache.
- Improved API performance by patching code hot spots, which reduced latency by 1s and lowered the RAM footprint by 20%.
- Enhanced the performance and reliability of a core, **scalable Java application** by maintaining and refactoring the **Spring Boot** codebase, resolving 100+ critical issues to reduce technical debt.
- Automated cloud resource provisioning and management by implementing Infrastructure as Code (IaC). Proficient in **Terraform** and AWS CloudFormation for deploying and managing application architecture effectively.

PROJECTS

Events Scheduler

Nov 2023 - Mar 2024

- Designed and developed 30+ RESTful APIs for user management, event handling, authentication, and authorization; deployed the backend using CI/CD pipelines on AWS Elastic Beanstalk.
- Launched the application on the App Store and Play Store, achieving an active user base of over **1,000+ users**.

EDUCATION

California State University, Long Beach

Jan 2023 - May 2024

Masters, Computer Science

- **Coursework:** Advanced Algorithms, Advanced Software Engineering, Artificial Intelligence, Pattern Recognition, Generative AI