

Laksh Jethani

Los Angeles, CA | +1 (352) 256-5058 | ljethani@usc.edu | linkedin.com/in/laksh-jethani | github.com/lakshjethani

EDUCATION

University of Southern California

Master of Science (M.S.), Computer Science

Relevant: Analysis of Algorithms, Geospatial Information Management, Web Technologies

Aug 2024 – May 2026

Los Angeles, CA

University of Mumbai

Bachelor of Engineering, Computer Science

Relevant: Distributed Computing, Object-Oriented Programming, Operating Systems

Aug 2018 – May 2022

Mumbai, India

EXPERIENCE

Software Engineer Intern, Supplyframe, a Siemens Company — Los Angeles, CA

May 2025 — Present

- Engineered and deployed a production-grade OAuth2 sign-in flow by resolving state mismatches, enforcing CSRF controls, and adding **Redis-backed scope caching**, ensuring secure and reliable authentication across dev/QA/prod.
- Optimized API performance by implementing exponential backoff on Swagger token retries and streamlining Solr-bound request payloads, lowering Solr traffic and **cutting p95 latency by 20% (480 ms → 380 ms)** at scale.
- Redesigned dev.hackaday.io into a modular EJS design system with Storybook; collaborated with design and QA to improve Core Web Vitals and cut PR review time by 25%.

Senior Software Development Engineer, Deutsche Bank — Pune, India

Aug 2023 – Jul 2024

- Improved payment success by **21%** on a **\$300M+/day** platform by adding a **Kafka** reprocessing pipeline with idempotency keys, transactional outbox, DLQs, and offset managed retries with jitter, reducing reconciliations and on call alerts.
- Migrated Fabric from on-prem to **GCP** using Infrastructure as Code with zero-downtime blue-green deployments, tuned autoscaling policies and multi-zone placement, and **reduced run cost by 17%** while improving resilience
- Integrated **Azure MFA** with a custom **OIDC** provider to federate external users, apply Conditional Access with step up MFA for sensitive scopes, standardize claims and token lifetimes, and reduce login escalations.
- Mentored two new grads through code reviews and debugging, speeding up onboarding and improving PR quality.

Software Development Engineer, Deutsche Bank — Pune, India

Aug 2022 – Jul 2023

- Maintained SLAs on critical paths using **circuit breakers**, idempotent retries, and full **observability** (metrics, logs, tracing).
- Decomposed a monolith into **Spring Boot microservices** using JPA and Hibernate, established thread safe concurrency controls, and standardized builds and dependency management with Maven
- Enhanced **React + Redux** architecture with optimized state handling, memoization, and lazy loading; implemented GraphQL/REST integration with caching and pagination, reducing re-renders by **40%** and improving responsiveness by **25%**.
- Led UAT cycles with 10+ users and analysts, prioritizing feedback that enabled delivery of **3** key features in the next release.

Software Development Engineering Intern, Deutsche Bank — Pune, India

Jun 2021 – Aug 2021

- Built a sharded cache with **Redis Cluster + Spring Boot**; implemented **consistent hashing**, a Raft-style **leader** for replicas, and **quorum** reads/writes with **version vectors** for concurrent updates
- Synced nodes with **Merkle trees + gossip**; prevented stampedes and duplicates with **lease** invalidation + **Bloom filters**

SELECTED PROJECTS

MCP SafeSQL — TypeScript/Node.js, SQLite/Postgres

Jan 2025

- Model Context Protocol server** exposing a read only `sql.query` with allowlisted views, parameterized queries, and PII masking; adds RBAC, audit logs, pooling, and OpenTelemetry for SQLite/Postgres
- Safe EXPLAIN** returns the operator tree with cost and row estimates without executing, redacts identifiers and literals, fingerprints statements for caching, and flags full scans or missing indexes

Distributed Observability Pipeline — Go, Kafka, OpenTelemetry, Elasticsearch, Kubernetes

March 2025

- Engineered a distributed observability pipeline using **Go** microservices and **Kafka** to ingest and index high-volume **OpenTelemetry** traces and logs (millions of events/minute) into **Elasticsearch** for real-time analysis.
- Deployed on **Kubernetes** with fine-grained **RBAC** for scalable and secure operations; implemented fault tolerance and proactive alerting, resulting in **99.9%** pipeline uptime.

TECHNICAL SKILLS

Languages: Java, Go, Python, TypeScript, JavaScript, SQL, HTML, CSS

Backend: Spring Boot, Node.js, Express, REST, GraphQL (Apollo), Django, JPA, Hibernate, OpenAPI

Frontend: React, Redux, EJS, SCSS, Storybook, Bootstrap, WCAG 2.1

Data & Messaging: PostgreSQL, MySQL, MongoDB, Redis, Apache Solr, Kafka, Celery

Cloud & DevOps: Google Cloud Platform, AWS Elastic Beanstalk, Docker, Kubernetes, GitHub Actions, Jenkins, IaC

Observability & Quality: OpenTelemetry, distributed tracing, JUnit, Mockito, Jest, Playwright, ESLint, Prettier, Nginx

Auth & Security: OAuth2, OIDC, CSRF, Azure MFA