

Laksh Jethani

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EDUCATION

University of Southern California <i>Master of Science (M.S.), Computer Science</i> Relevant: Analysis of Algorithms, Geospatial Information Management, Web Technologies	Aug 2024 – May 2026 Los Angeles, CA
University of Mumbai <i>Bachelor of Engineering, Computer Science</i> 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 <code>sql.query</code> 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