

Lekhraj Kumar

+91-7018204677 | lekh.nith@gmail.com | [Github](#) | [Leetcode](#)

Pune, Maharashtra, India

SUMMARY

Software Engineer with 5+ years of experience building and scaling high-throughput distributed systems in payments and SaaS domains. Expertise in microservices, event-driven architectures, system performance optimization, and production reliability. Strong background in Java-based systems with hands-on experience in Kafka, Docker, Kubernetes, observability, and large-scale backend services. Actively expanding skillset in Golang for high-performance systems.

EDUCATION

National Institute of Technology Hamirpur, India

Dual Degree (Bachelor & Master of Technology); Electronics & Communication Engg

Himachal Pradesh, IN

Jul 2015 – June 2020

- Cumulative GPA: 8.65/10.0

SKILLS

- **Programming Languages:** Java (Primary), Golang (working knowledge), JavaScript
- **Backend Frameworks & APIs:** Spring Boot, Spring Security, Hibernate/JPA, RESTful APIs, GraphQL, WebSockets, OAuth2
- **Distributed Systems & Architecture:** Microservices, Event-Driven Architecture, Domain-Driven Design (DDD), System Design (HLD/LLD), SaaS Platforms
- **Messaging & Streaming:** Kafka, RabbitMQ
- **Datastores & Caching:** MySQL, PostgreSQL, MongoDB, Redis
- **Cloud, DevOps & Infrastructure:** Docker, Kubernetes, Helm, CI/CD (GitHub Actions, Jenkins), AWS (API Gateway, S3 – basic)
- **Observability & Reliability:** Prometheus (metrics), Elasticsearch, Logstash, Datadog APM, Centralized Logging, Monitoring & Alerting
- **Testing & Quality:** JUnit, Mockito, Integration Testing, Contract Testing, Test-Driven Development (TDD)
- **Frontend (Working Knowledge):** React.js, Mantine, Wicket
- **Engineering Practices:** Agile/Scrum, Code Reviews, On-call Support, Incident Response, Root Cause Analysis (RCA), Cross-functional Collaboration
- **System Performance & Reliability:**
 - Optimized JVM memory, GC tuning, and thread pools for high-RPS services
 - Designed rate limiting, circuit breakers, retries, and backoff strategies
 - Built observability using Prometheus, Actuator, Datadog APM, and centralized logging
 - Performed load testing and capacity planning for services handling 10K+ RPS

WORK EXPERIENCE

AppDirect

Software Development Engineer II

Pune, IN

Sep 2022 – Present

- Designed and owned multiple high-availability microservices for Billing, Checkout, Notifications, and Payments, supporting thousands of concurrent requests with p99 latency targets under 200ms and 99.9%+ availability.
- Built integrations with platforms like PayPal, Stripe, and Billpay via custom connectors, ensuring secure and reliable payment processing.
- Migrated legacy RabbitMQ-based event pipelines to Kafka, improving event throughput by ~4x and enabling horizontal scalability, replayability, and fault-tolerant processing for billing and payment workflows handling millions of events per day.
- Developed MicroUI components using React and Mantine for real-time user features and operational visibility.
- Contributed to decomposing a monolithic system into domain-aligned microservices using event-driven architecture, enabling independent scaling, faster deployments, and improved fault isolation.
- Practiced TDD with JUnit and Mockito, delivering comprehensive unit and integration tests, and built automated CI/CD pipelines using GitHub Actions.
- Participated in on-call rotations, debugging and resolving production incidents, performing root cause analysis (RCA), and implementing long-term fixes to improve system reliability.

- Customized and extended core banking modules using Java and JavaScript to meet client-specific regulatory and business requirements in mission-critical banking systems
- Migrated legacy Finacle scripts to modern Java-based microservices, improving maintainability, testability, deployment reliability, and fault isolation.
- Built and maintained EOD/BOD automation workflows to streamline time-sensitive banking operations, reducing manual effort and operational risk.
- Delivered scalable and reliable solutions across CASA, Loans, and Term Deposit (TD) modules, ensuring transactional integrity and data consistency.
- Investigated and resolved production issues, performed root cause analysis, and implemented fixes to stabilize live banking systems.

PROJECTS

Router Service (High-Performance Request Router/Load Balancer)

[Link](#)

Tech: Java 21, Spring Boot 3.5, Docker, WebSockets, Prometheus

- Designed and built a high-performance, enterprise-grade request router inspired by API gateways, focusing on low-latency routing, fault tolerance, and horizontal scalability.
- Implemented advanced routing using regex-based rules and multiple load-balancing strategies (Round Robin, Random, Least Connections).
- Added resilience patterns including circuit breakers, retries with exponential backoff, and token-bucket rate limiting to handle traffic spikes and downstream failures.
- Enabled real-time metrics streaming via WebSockets and built a monitoring dashboard for live traffic and health visibility.
- Implemented full observability using Spring Actuator, Prometheus metrics, and centralized logging.
- Optimized JVM memory, threading, and Docker multi-stage builds; validated performance with load testing up to 10,000+ RPS and 1M+ requests in stress scenarios.

Real-Time Chat & File-Sharing Backend

[Link](#)

Tech: Java 21, Spring Boot 3.x, GraphQL, WebSockets, AWS S3, Docker

- Building a production-ready, real-time chat and file-sharing backend with a focus on scalability, security, and low-latency communication.
- Implemented JWT-based authentication, role-based access control, email verification, and real-time messaging using WebSockets.
- Designed S3-backed file management with antivirus scanning, persistent notifications, user preferences, and an admin dashboard.
- Integrated observability using Actuator, Prometheus, and centralized logging to monitor system health and performance.
- Automated database migrations with Flyway and CI/CD pipelines for reliable, repeatable deployments.

E-Commerce Backend Platform

[Link](#)

Tech: Java 11, Spring Boot 2.7, Spring Data JPA, MySQL

- Developed a production-ready RESTful e-commerce backend supporting user authentication, product and category management, cart and order workflows, and Stripe-based payment processing.
- Designed secure token-based authentication, robust validation, standardized error handling, and well-documented APIs using Swagger.
- Followed layered architecture (Controller-Service-Repository) with clean separation of concerns for maintainability and extensibility.

ADDITIONAL INFORMATION

Languages: Proficient in English, Native Speaker in Hindi
Interests: Cricket, Badminton, Photography, Travelling