

Avinash Rana

✉ avinashranaji2011@gmail.com | 📞 9771-971-429
🐙 github.com/avinashsinghrana | 🔗 linkedin.com/in/avinashsinghrana

Professional Summary

Senior Software Engineer with **6+ years of experience** building scalable backend systems, microservices and fintech platforms using **Java, Spring Boot, Kafka, Redis and PostgreSQL**. Proven expertise in designing high-throughput distributed systems, optimizing application performance by **60%+**, and delivering resilient, low-latency solutions processing **350+ TPS** for millions of users.

Skills

Languages: Java, SQL

Technologies & Tools: Spring Boot, Spring Security, Spring AI, Resilience4j, Hibernate, JPA, PostgreSQL, MySQL, Redis, Kafka, Docker, Kubernetes, Jenkins, Git, Maven, Nginx, Kong API Gateway, AWS (Lambda, S3, ECS, EKS)

Core Expertise: Microservices, REST APIs, Distributed Systems, Event-Driven Architecture, Design Patterns, OAuth2, JWT, RBAC, System Design, CI/CD, Performance Optimization, Observability, Low-Latency Systems, Scalability, High Availability, Distributed Caching.

Work Experience

PineLabs, Noida

Apr 2025 - Present

Senior Software Engineer

- Engineered a highly available Offer Redemption Service processing **350+ TPS** using Kafka, Redis, and PostgreSQL, enabling low-latency real-time reward redemption through a scalable event-driven architecture.
- Developed a campaign management platform supporting **real-time & scheduled campaigns** for millions of customers, enabling **personalized offer delivery** and **merchant engagement**.
- Reduced redemption latency by **60%** through Redis caching, asynchronous workflows and PostgreSQL optimization.
- Tech Stack:** Java, Spring Boot, PostgreSQL, Redis, Kafka, Docker, Kubernetes, Jenkins, OAuth2, JWT, REST APIs, Microservices, Distributed Systems

Airtel Payments Bank, Gurgaon

Dec 2022 - Apr 2025

SDE II

- Developed high-performance microservices for recharge and retailer refund workflows, supporting large-scale transaction processing.
- Delivered end-to-end NCMC card issuance and management workflows through Airtel Thanks.
- Improved transaction security and platform scalability through payment gateway integrations and microservices architecture.
- Tech Stack:** Java, Spring Boot, Oracle, Kong API Gateway, Nginx, Kafka, AeroSpike, JWT, REST APIs, Microservices

Credable, Noida

Aug 2020 - Sep 2022

Product Engineer

- Improved lending operations by developing microservices for loan disbursement, collections, settlements and reconciliation, reducing manual processing effort by **70%**.
- Automated co-lender disbursement workflows through banking integrations, reducing processing time from hours to minutes and improving operational efficiency.
- Enhanced risk management by implementing credit limit management and invoice validation modules, reducing validation turnaround time by **50%**.
- Improved business visibility through real-time dashboards and reporting solutions, reducing manual report generation effort by **80%**.
- Tech Stack:** Java, Spring Boot, PostgreSQL, MySQL, REST APIs, Metabase, Microservices, Kafka, S3, Lambda, CI/CD

Education

Technocrats Institute of Technology, Bhopal

Aug 2015 - Jun 2019

B.E. in Computer Science and Engineering

CGPA: 7.16/10

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Database Systems, Operating Systems, Computer Networks, Distributed Systems, Design & Analysis of Algorithms

Key Projects

- **Customer Engagement & Campaign Platform:** Architected a merchant-facing platform enabling audience segmentation, campaign orchestration, real-time and scheduled campaign execution, and personalized offer delivery for millions of customers. *Java, Spring Boot, Kafka, Redis, PostgreSQL*
- **Offer Redemption & Rewards Engine:** Designed a high-throughput distributed rewards engine processing **350+ TPS**, supporting real-time offer validation, distributed capping, idempotent processing and low-latency transaction execution. *Java, Spring Boot, Kafka, Redis, PostgreSQL*
- **Digital Card Lifecycle Platform:** Delivered end-to-end debit card and NCMC lifecycle management including card issuance, ordering, activation, AMC processing, card controls and customer self-service capabilities through Airtel Thanks. *Java, Spring Boot, Oracle, REST APIs*
- **Lending & Settlement Platform:** Built scalable lending workflows supporting co-lending, loan disbursement, settlement, reconciliation, risk validation and automated financial operations for NBFC financing products. *Java, Spring Boot, MySql, Microservices*

Awards and Certifications

- **Best Performer Award 2024** – Airtel Payments Bank
- **Cred-Enabler Award Q2 2021** – CredAble
- **Mentor at BridgeLabz Solutions** – Mentored engineering graduates on Java, Spring Boot, Data Structures, Algorithms and System Design.
- **TechGig Code Gladiators 2022** – Secured 371st Rank in the Grand Finale.