EKOM SINGH BAGGA

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PROFESSIONAL SUMMARY

Java Backend Engineer with 3+ years at Oracle building, testing, debugging and deploying Spring Boot microservices and REST APIs on a cloud communications platform. Led a JDK 11 to 17/21 migration across 15+ modules, stabilized 25+ services post-migration, and built secure real-time WebSocket/gRPC integrations with an OpenAI-based AI connector. Strong in Docker, Kubernetes, Helm, Jenkins CI/CD, SQL/NoSQL databases, Kafka, JWT/TLS security and production troubleshooting, with 500+ DSA problems solved (LeetCode 1700+). Seeking Backend / Java Developer / SDE roles.

TECHNICAL SKILLS

- **Languages:** Java (8/11/17/21), Python, C/C++, JavaScript, SQL
- **Backend & Frameworks:** Spring Boot, Spring MVC, Spring Security, Microservices, REST API Design, Idempotent APIs, gRPC, WebSocket (WSS), Multithreading, OOP, Design Patterns, System Design
- **Security:** JWT Authentication, SSL/TLS, Certificate and Identity Management, Cryptography Upgrades
- **Databases & Messaging:** Oracle DB, MySQL, PostgreSQL, MongoDB, Redis, Apache Kafka
- **DevOps & Cloud-Native:** Docker, Kubernetes, Helm, Jenkins CI/CD, Maven, Git/GitHub, Oracle Linux, Linux, Cloud Services
- **Testing:** JUnit, Mockito, Robot Framework, Java Selenium, Unit and Integration Testing, Postman
- **Telecom & Networking:** SIP, VoIP, SIPp, WebRTC, TCP/UDP, HTTP, Quality of Service (QoS)
- **AI-Assisted Engineering:** Claude, OpenAI Codex, GitHub Copilot, Gemini; OpenAI API integration
- **Front End:** React (project experience), JavaScript
- **Practices & Tools:** Agile/Scrum, Code Reviews, Debugging, Root Cause Analysis, JIRA, Data Structures and Algorithms

PROFESSIONAL EXPERIENCE

Oracle Aug 2023 – Present
Associate Software Developer (Backend) *Bangalore, Karnataka*

- Led the JDK 11 to 17 and 21 migration across a core Java communications framework, touching 15+ modules and resolving cross-version compatibility issues.
- Diagnosed and fixed critical post-migration failures across 25+ microservices (session management, identity, monitoring), restoring full system stability.
- Built a Java WebSocket API layer between 2 core components and an OpenAI-integrated AI connector, using gRPC for internal communication; secured the channel with WSS and JWT authentication.
- Redesigned identity and certificate management, fixing 15 of 25 failing cases and a certificate-expiry issue, and upgraded cryptographic algorithms to meet enterprise security standards.
- Built idempotent REST APIs so retried requests are processed safely; wrote JUnit/Mockito tests and resolved Maven build issues across 5 project suites to keep Jenkins CI stable.
- Streamlined containerization and deployment of backend services on Kubernetes and contributed to Helm charts to standardize deployments across environments.
- Architected an automation framework for infrastructure validation comparing REST APIs, YAML configs and management beans, cutting manual validation effort by over 30%.
- Led upgrade of a cloud communications service, integrating SIP/telecom signaling connections across tenants and independently resolving configuration issues.
- Used AI coding assistants (Claude, OpenAI Codex) for code generation, refactoring, debugging and test creation, reviewing and testing all generated code before merge.
- Worked in an Agile/Scrum team with QA and DevOps; troubleshot on Oracle Linux and logged reproducible bugs in JIRA.

Oracle Jan 2023 – Jul 2023
Project Intern *Bangalore, Karnataka*

- Designed and built a customer management system for retail use cases with Java, Spring Boot, MySQL and REST APIs, owning it end to end from design to validation.
- Presented architecture decisions to senior engineers in a technical evaluation.

EDUCATION

Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Jabalpur Aug 2019 – Jul 2023
B.Tech. in Computer Science and Engineering CGPA: 8.0/10

ACHIEVEMENTS

- Solved 500+ DSA problems (400+ LeetCode, 200+ GeeksforGeeks); LeetCode contest rating 1700+; CodeChef 4-Star (highest rating 1937).
- Global Rank 934 of 21K+ in LeetCode Biweekly Contest 73; All India Rank 12K of 1M+ in JEE Mains.