PULKIT MITTAL

Software Engineer | Backend, Cloud & Distributed Systems | AI Engineering

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EXPERIENCE

Oracle
Jan 2025 - Present

Software Development Engineer II | Bengaluru, India · Remote

- Implemented Java/Micronaut microservices and REST APIs for contract pricing and reimbursement calculations within enterprise US healthcare platforms.
- Coordinated concurrent Kafka processing with Redisson distributed locks and idempotency controls.
- Integrated healthcare data using SQL, semantic-object APIs, and RDF/SPARQL knowledge-graph queries.
- Implemented Redis caching and invalidation for repeated knowledge-graph lookups; added bounded retries for rate-limited requests.
- Developed Model Context Protocol (MCP) integrations, agents, plugins, and reusable skills for AI-driven engineering workflows, combining authenticated API checks, operational diagnostics, and human approval gates.
- Instrumented service latency, processing failures, and backlogs with metrics and traces; built Grafana dashboards to isolate downstream delays and guide performance tuning.
- Diagnosed JVM and production reliability issues with Java Flight Recorder, Kubernetes diagnostics, and correlated logs; delivered fixes with regression coverage.
- Optimized Maven builds; resolved dependency and CI/CD failures in Oracle Cloud Infrastructure (OCI) DevOps.

Falkor (formerly Kongsberg Digital)
Jul 2022 - Dec 2024

Software Development Engineer | Bengaluru, India · Hybrid

- Developed Java/Spring Boot APIs and Angular/TypeScript dashboards for real-time drilling and well monitoring in the oil and gas industry.
- Integrated live drilling feeds into lithology interpretation workflows; optimized APIs and SQL procedures to automate data retrieval and streamline reporting.
- Resolved production incidents, delivered hotfixes and deployments, and fixed CI/CD pipeline issues during an **eight-month onsite assignment** at Saudi Aramco in Dhahran.

PROJECTS

Knowledge Base

Built a reusable AI engineering framework with **persistent project context**, runbooks, source verification, and validation scripts, with human approval gates across the software development lifecycle (SDLC).

Resume Automation

Built a cross-platform Python CLI for scheduled resume updates on job portals, with extensible providers, native OS scheduling, secure credential storage, reusable sessions, **upload verification**, and process locking.

TECHNICAL SKILLS

Languages: Java, Python, SQL, TypeScript, JavaScript

Backend & Data: Micronaut, Spring Boot, REST APIs, microservices, Kafka, Redis/Redisson, JPA/Hibernate

Data & Knowledge: Oracle Database, RDF, SPARQL, knowledge graphs

Cloud & DevOps: Oracle Cloud Infrastructure (OCI), Kubernetes, Docker, Maven, CI/CD, Git

Observability & Testing: Grafana, Java Flight Recorder (JFR), JUnit, Mockito, pytest, Playwright

AI Engineering: MCP integrations, agents, plugins, reusable skills, AI-assisted SDLC, context management

ACHIEVEMENTS & CERTIFICATIONS

- Received the **Spotlight Award** for contributions during the Saudi Aramco deployment.
- Solved **1,000+ problems** across LeetCode and GeeksforGeeks.

Oracle AI Vector Search Certified Professional

OCI 2025 Certified Generative AI Professional

OCI Certified AI Foundations Associate

Microsoft Certified: Azure Fundamentals (AZ-900)

EDUCATION

B.Tech in Computer Science
2018 - 2022

University of Petroleum and Energy Studies, Dehradun | CGPA: 8.55