Aditya Thakur

Software Engineer with over 7 YOE
Nagarro Software Pvt. Ltd.

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GitHub Contributions ↗   LinkedIn ↗

Java Microservices Backend and DevOps Platform Engineer looking for opportunities to apply strong technical expertise and emerging AI skills to build robust, intelligent, and scalable applications.

SKILLS

- **Languages/Frameworks/Libraries**: Java, Spring Boot, Spring Cloud, Spring Security, Spring WebFlux, Reactive with Mono/Flux and Mutiny (Uni/Multi), WebClient, RestTemplate, Feign Client, AOP, Quarkus native, JWT/OAuth2, MapStruct, Jackson, Gson, Lombok, Log4j/Slf4j, Micrometer, OpenTelemetry, Shell (Bash), JavaScript/TypeScript, SQL, Python, NodeJS, ReactJS

- **Architecture**: Microservices Architecture, Event-Driven Architecture, Distributed Systems, REST APIs, API-first, Design Patterns, SOLID Principles, Distributed Observability with centralized logging and tracing

- **Messaging & Streaming**: Apache Kafka (Producers, Consumers, Streams, Connectors), Debezium CDC

- **Persistence, Search & Caching**: JPA/Hibernate, Panache, PostgreSQL, MySQL, Oracle SQL, Aurora DB, MongoDB, Redis/Valkey Cache, Flyway

- **Developer Tools**: IntelliJ IDEA, VS Code, STS, Git, Maven, Gradle, SonarQube, Postman, DBeaver, pgAdmin, Atlassian Jira, ServiceNow, GraalVM

- **DevOps & Cloud**: GitHub Actions, Docker, Kubernetes, Helm Charts, KEDA, AWS (EKS, ECR, S3, RDS, CodePipeline, CodeBuild, Secrets Manager, CDK), Jenkins, GCP (GKE, Compute Engine)

- **Tools/Platforms**: Git, ArgoCD, Prisma Cloud Compute, Istio Service Mesh, Terraform, Backstage

- **Observability & Performance**: Grafana, Prometheus, Splunk, Dynatrace, Kibana, VictorOps, Distributed Tracing, JMeter, Profiling & Performance Tuning

- **AI-Assisted Development & Automation**: Prompt Engineering, AI Code Migration, Developer Automation, RAG Architecture, Vector Databases, AI Tools (ChatGPT, Claude, GitHub Copilot, Amazon Bedrock)

- **Testing & Documentation**: JUnit, Mockito, Swagger UI/OpenAPI, Performance Testing with K6, Contract Testing with Microcks, mkdocs, Atlassian Confluence

- **Data Formats & Standards**: JSON, YAML, XML, AVRO, OpenAPI Specification, Markdown, HTML

- **Domain Experience**: Fintech Financial Systems, E-Commerce & Retail

- **HomeLab & AI/ML**: IoT, Home Automation with HomeAssistant, Proxmox, LLM, Ollama, Gradio, ComfyUI, n8n

EXPERIENCE

- **Nagarro - Digital Product Engineering Platform** — Remote, Jul. 2021 - Present
  Platform Engineering, CRM - Associate Staff Engineer — *Java 21, Gradle, Docker, Eventing, AWS, AI*

  - **Multi-tenant Microservices, Frameworks & Build Plugins**: Production-grade observability, security, database & Kafka starter libraries ensuring comprehensive system functionality & increased development efficiency. Developed plugins for OpenAPI and AsyncAPI/AVRO specifications, facilitating code generation and scaffolding with Projen. Used by around 100 microservices for rapid API-first development.

  - **Event-driven**: Designed and established loosely coupled distributed systems using Spring Boot, Quarkus (Native), Apache Kafka, and Debezium (CDC) for real-time data streaming and high throughput processing. Owned Enterprise-grade notification service utilizing Kafka connectors.

  - **Cross-cutting DevOps & Security concerns**: Created & improved Docker base images with 58% size reduction & 43% reduction in security vulnerabilities. Used capabilities like multi-stage and multi-arch for increased efficiency. Strengthened security with GitHub Actions checks like SonarQube and established a robust tagging and versioning flow. Achieved 80% & 33% run time reduction respectively in checkstyle & other checks.

  - **Cost & performance optimization with AI/MLOps**: Prepared AI agents and MCP Servers with Amazon Bedrock, Amazon SageMaker and Claude to migrate from Spring Boot 3 to Quarkus 3 (native) with perf test metrics showing over 150% throughput improvement or 50% reduced resource consumption & 86% reduced Docker image size.

  - **Cloud Automation & SRE**: Provisioned infrastructure with AWS CDK constructs in TypeScript to manage CloudFormation templates & CI/CD pipelines in Bash script; Deployed services with Helm Charts & ChartMuseum; System monitoring, alerting & troubleshooting with tools like Splunk, Dynatrace, Grafana, Tempo & Prometheus.

  - **Migration**: Assisted in the transition from monolith to microservice sarchitecture enhancing scalability with 20% reduction in time-to-market.

  - **E-commerce and CRM Development**: Designed and developed a revamped e-commerce platform and CRM gateway, improving user experience and system efficiency.

  - **CRM Gateway Request Processing**: Accepted, processed & routed Account & Appointment bookings from different sources with query and mutation. GraphQL, Netflix DGS library, CRUD, Agile

  - **Tool Integration**: Integrated with external tools like Salesforce, Exponea & LeadSquared.

- **Verifone India Pvt. Ltd. - A Payment Gateway Company** — Bangalore, Mar. 2019 - June 2021
  Microservices Orchestrator and Payment Processors - SDE — *Java 11, Spring Boot 2, Tomcat, Maven*

  - **Workflow Definition**: Created a fully flexible structure to define microservices workflow customized for multiple markets using Spring Beans, Spring Async, and Spring Retry to handle exceptions and send custom responses.

  - **JSON & HEX**: Translated JSON from Terminal/POS payment devices into Acquirer-specific HEX requests & response back to JSON. Java 8, OOP principles, SOLID design

- ○ **FOREX Integration**: Communicated with FOREX Rate processing provider over HTTP using REST & JSON.
- ○ **Code Development and Repository Management**: Spearheaded code development, configuration, and administration of Bitbucket repositories and Jenkins jobs.
- ○ **Performance Optimization**: Achieved a <u>90% reduction in execution time</u> through custom benchmarking using Java Microbenchmarking Harness (JMH).
- ○ **Project Deliveries**: Delivered critical payment domain projects for both internal stakeholders and international clients, ensuring high standards of quality and timeliness.

PROJECTS

- **PG-DAC, ACTS** — Pune
  Java Developer — *Aug. 2018 - Feb. 2019*
  - ○ **Web Application Development**: Implemented a web app for student-faculty interaction within a month.
- **AndroAddyct** — Remote
  Android App Development Freelancer — *May 2016 - Dec. 2016*
  - ○ **App Lifecycle Management**: Managed app lifecycle with about <u>900 active user devices</u> across <u>175 countries/regions</u>.

ACCOLADES, RECOGNITION & CERTIFICATIONS

- **Nagarro**
  Review & Feedback
  - ○ **2025**: Engineering Excellence Award
  - ○ **Consistent**: Extraordinary Role Model, Highly Valuable feedback
- **Udemy**
  Certifications
  - ○ **AI/ML**: Completed Training on LLM Engineering, Generative AI, Agentic AI Engineer and AI Engineer Production Track
  - ○ **DevOps**: Kubernetes, Docker, Git
  - ○ **JavaScript**: NodeJS, ReactJS
- **KodeKloud**
  Certifications
  - ○ **AWS**: Basics, ECS
  - ○ **DevOps**: Kubernetes

EDUCATION

- PG-DAC from CDAC-ACTS, Pune, MH (79.25%)
- B.E. from MIET(RTMNU), Gondia, MH (78.80%)