

# Aditya Thakur

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

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.

[engg.aditya.thakur@gmail.com](mailto:engg.aditya.thakur@gmail.com)  
[GitHub Contributions](#) [LinkedIn](#)

## 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

## PROJECTS

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|---|---|
| <ul style="list-style-type: none"> <li>● <b>Platform Engineering</b></li> </ul>   | Mar. 2022 - Present                               |
| <ul style="list-style-type: none"> <li>● <i>Nagarro</i></li> </ul>  | <i>Java 21, Gradle, Docker, Eventing, AWS, AI</i> |
| <ul style="list-style-type: none"> <li>○ <b>Multi-tenant Microservices, Frameworks &amp; Build Plugins:</b> Implemented observability, security, database &amp; Kafka starter libraries ensuring comprehensive system functionality &amp; increased development efficiency. Notification service utilizing Kafka connectors. Developed plugins for OpenAPI and AsyncAPI/AVRO specifications, facilitating code generation and scaffolding with Projen. Used by around <u>100 microservices</u> for rapid API-first development.</li> <li>○ <b>Cross-cutting DevOps &amp; Security concerns:</b> Created, managed &amp; improved Docker base images with <u>58% size reduction</u> &amp; <u>43% reduction</u> 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 <u>80%</u> &amp; <u>33% run time reduction</u> respectively in checkstyle &amp; other checks.</li> <li>○ <b>Cost &amp; performance optimization with AI/MLOps:</b> 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 <u>150% throughput improvement</u> or <u>50% reduced resource consumption</u> &amp; <u>86% reduced Docker image size</u>.</li> <li>○ <b>Cloud Automation &amp; SRE:</b> Provisioned infrastructure with <b>AWS CDK</b> constructs in TypeScript to manage CloudFormation templates &amp; CI/CD pipelines in <b>Bash script</b>; Deployed services with <b>Helm Charts &amp; ChartMuseum</b>; System monitoring, alerting &amp; troubleshooting with tools like Splunk, Dynatrace, Grafana, Tempo &amp; Prometheus.</li> </ul> |   |
| <b>Microservices Orchestrator</b>   |   |
| <ul style="list-style-type: none"> <li>● <i>Verifone India Pvt. Ltd.</i></li> </ul>   | Oct. 2019 - June 2021                             |
| <ul style="list-style-type: none"> <li>○ <b>Workflow Definition:</b> Created a fully flexible structure to define microservices workflow using Spring Beans, Spring Async, and Spring Retry to handle exceptions and send custom responses.</li> </ul>  |   |
| <b>Terminal/POS Payment &amp; FOREX Rate Processors</b>   |   |
| <ul style="list-style-type: none"> <li>● <i>Verifone India Pvt. Ltd.</i></li> </ul>   | Mar. 2019 - Sept. 2019, Jan. 2021 - June 2021     |
| <ul style="list-style-type: none"> <li>○ <b>JSON &amp; HEX:</b> Translated JSON from payment devices into Acquirer-specific HEX requests &amp; response back to JSON.</li> <li>○ <b>FOREX Integration:</b> Communicated with FOREX provider over HTTP using REST &amp; JSON.</li> </ul>   |   |
| <b>Customer Resource Management(CRM) Gateway</b>  |   |
| <ul style="list-style-type: none"> <li>● <i>Nagarro</i></li> </ul>  | July 2021 - Feb. 2022                             |
| <ul style="list-style-type: none"> <li>○ <b>Request Processing:</b> Accepted, processed &amp; routed Account &amp; Appointment bookings from different sources with query and mutation.</li> <li>○ <b>Tool Integration:</b> Integrated with external tools like Salesforce, Exponea &amp; LeadSquared.</li> </ul>   |   |

## EXPERIENCE

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- **Nagarro - Digital Product Engineering Platform** Remote  
July 2021 - Present
  - *Associate Staff Engineer*
    - **Migration:** Assisted in the transition from monolith to microservice architecture enhancing scalability.
    - **E-commerce and CRM Development:** Designed and developed a revamped e-commerce platform and CRM gateway, improving user experience and system efficiency.
- **Verifone India Pvt. Ltd. - A Payment Gateway Company** Bangalore  
Feb. 2019 - June 2021
  - *Software Development Engineer*
    - **Code Development and Repository Management:** Spearheaded code development, configuration, and administration of Bitbucket repositories and Jenkins jobs.
    - **Performance Optimization:** Achieved a 90% reduction in execution time 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.
- **PG-DAC, ACTS** Pune  
Aug. 2018 - Feb. 2019
  - *Java Developer*
    - **Web Application Development:** Implemented a web app for student-faculty interaction.
- **AndroAddyct** Remote  
May 2016 - Dec. 2016
  - *Android App Development Freelancer*
    - **App Lifecycle Management:** Managed app lifecycle with about 900 active user devices across 175 countries/regions.

## EDUCATION

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