

Aadesh Wagh

Software Engineer II — Backend & Distributed Systems



PROFILE

Software Engineer with 3+ years building backend and distributed systems for financial markets at UBS. Specializes in high-throughput, low-latency FX trade-processing infrastructure — FIX connectivity, event-driven Java/Spring Boot microservices, and Kubernetes — owning design, delivery, performance, and production reliability end to end. Particularly interested in distributed systems, high-performance computing, and financial technology.

CONTACT

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Website aadeshwagh.com

LinkedIn [in/aadeshwagh](https://in.linkedin.com/in/aadeshwagh)

GitHub github.com/aadeshwagh

Location Pune, India

EXPERIENCE

Feb 2026 – Present

Software Engineer II

UBS · Authorized Officer · Pune, India

- Own the end-to-end lifecycle for onboarding new FX ECN trade-processing channels — requirements, system design, development, testing, and production — defining the FIX ingestion, validation, transformation, persistence, and routing architecture for each.
- Helped deliver the world's first intraday FX swap between two major banks — a milestone featured in a UBS press release — building the UBS-side platform and downstream settlement integration end to end, with zero defects at launch.
- Architected each trade channel as an isolated, independently scalable Kubernetes workload, containing failures so an issue in one channel never cascades across the platform.
- Replaced a third-party vendor application with an in-house platform, saving the bank ~£500K (~\$675K) annually — owning onboarding, configuration, testing, and production implementation.
- Own production reliability and on-call for live ECN channels carrying high-value FX flow, driving observability, incident response, and performance tuning.

Aug 2023 – Jan 2026

Software Engineer

UBS · Pune, India

- Built core components of the ECN trade-processing platform as event-driven Java/Spring Boot services on Kubernetes, sustaining 99.9%+ reliability across ~1,000 high-value transactions per day.
- Reduced P99 latency 38% (210 ms → 130 ms) through a concurrency redesign (Java ExecutorService) and HikariCP tuning, and enabled horizontal scaling via a Kubernetes/Helm migration (provisioning ~4 hours → 12 minutes).
- Built observability with Prometheus and 14 Grafana dashboards and alerting, cutting mean-time-to-detect 55%.

Jan 2023 – Jun 2023

Software Developer Intern

UBS · Pune, India

- Developed and deployed Spring Boot REST APIs across the full trade-booking lifecycle, promoted to production and integrated into live trade-processing systems.
- Raised unit-test coverage 40% (JUnit 5, Mockito) and built a GitLab CI/CD pipeline automating test execution, artifact builds, and deployment.

Software Developer Intern

GitHub · India

- Built a full-stack client onboarding portal with Java, Spring Boot, Angular, and PostgreSQL, and contributed to open-source projects in a fast-paced, collaborative environment.

PROJECTS

AmaterasuSQL — Relational Database Engine · Java, Gradle

A relational database engine built from scratch — custom SQL parser, file-based storage engine, and a predicate-pushdown query executor — demonstrating query-planning and I/O internals.

GuardBot — Runtime Security for Agentic AI · Python, FastAPI, Nextjs, Azure OpenAI

A full-stack autonomous security agent with two-stage detection (rule-based + LLM reasoning), automated response, forensic reporting, and SIEM incident creation for enterprise AI-agent workflows.

ContentWiz — AI Content Pipeline · Java, Spring Boot, Python, FFmpeg

An automated pipeline turning source material into finished short-form video, orchestrating async AI generation and FFmpeg media processing end to end.

EDUCATION

Aug 2019 – May 2023

B.Tech, Computer Engineering

Vishwakarma Institute of Technology, Pune

- Graduated with a strong academic record — CGPA 9.03 / 10.
- Built a solid foundation in data structures, systems design, and distributed systems.

SKILLS

LANGUAGES	Java (primary), TypeScript, Python, SQL, C++, Bash
BACKEND	Spring Boot, Spring Data JPA, Spring Integration, REST APIs, Microservices, Event-Driven Architecture, gRPC / GraphQL
CLOUD & DEVOPS	Kubernetes (AKS / EKS), Docker, Helm, Terraform, Azure, AWS, GitLab CI/CD, Git
RELIABILITY	Prometheus, Grafana, observability, on-call, incident management, root-cause analysis
DATA	PostgreSQL, Oracle, HikariCP; Spark / PySpark, Databricks (familiar)
DOMAIN	Foreign Exchange (FX), FIX Protocol, Bloomberg ECN, trade lifecycle, financial markets
TESTING	JUnit 5, Mockito, unit & integration testing, TDD

LANGUAGES

English — Native / Bilingual · Hindi — Native · Marathi — Native

INTERESTS

Writing

Currently hooked on deconstructing complex trading systems — and writing about what I learn at aadeshwagh.com.

Cooking

An enthusiastic home cook; currently exploring Japanese cuisine.

Tennis

On court most weekends — still working on that backhand.

Poetry Club

I enjoy reading, exploring, and sharing regional and global poetry.