


ARITRA DUTTA

✉ aritradutta049@gmail.com  [LinkedIn](#)  [GitHub](#)  [Portfolio](#)

PROFESSIONAL SUMMARY

Backend Software Engineer with 1.5+ years of production experience designing and delivering secure, scalable Java microservices and Angular applications serving 10K+ daily users. Proven expertise in REST API development, distributed systems, SQL optimization, and cloud infrastructure on Azure. Demonstrated ability to own complex workflows end-to-end — from architecture and implementation to production deployment and reliability. Strong track record of 20–30x performance improvements, zero-downtime migrations, and cross-functional collaboration with product, QA, and DevOps teams. Hands-on experience with application security (SAST/DAST), OAuth2/JWT, and CI/CD automation.

TECHNICAL SKILLS

Languages: Java (Expert), TypeScript, Python, C++

Backend & APIs: Spring Boot, REST APIs, Microservices Architecture, Distributed Systems, Hibernate/JPA, Maven

Frontend: Angular (v17–v20), React, HTML5, CSS3

Databases: PostgreSQL (Query Optimization, Schema Design, Indexing, Transactions), Oracle, Database Migrations

Security: Application Security (SAST/DAST), OAuth2, JWT, Secure API Design

Cloud & DevOps: Microsoft Azure (PaaS, App Services), Docker, Jenkins CI/CD, Linux/Unix, Git

Testing: JUnit, Integration Testing, Unit Testing

PROFESSIONAL EXPERIENCE

Assistant System Engineer – Backend & Microservices

September 2024 – Present

Tata Consultancy Services (TCS) · Bhubaneswar, India

iDeclare (Ultimatix)

Sep 2025 – Present

Tech Stack: Java 17, Spring Boot 3, PostgreSQL, Angular v20, TypeScript, Azure PaaS, Jenkins, Docker, Git

- Single-handedly decomposed iDeclare from a monolithic application into an independent microservice — architected the full database schema, built **20+ REST APIs**, and owned end-to-end production delivery on schedule.
- Executed **zero-downtime production migration** from JBoss PaaS to Tomcat PaaS on Microsoft Azure — coordinated with infra and DevOps teams, defined rollback strategies, and validated post-migration stability across **10K+ daily users**.
- Led critical version upgrades in live production environment: **Java 8 → 17** and **Spring Boot 2 → 3** — resolved breaking changes, refactored deprecated APIs, and maintained backward compatibility with zero service disruption.
- Optimized critical SQL queries and database schemas achieving **20x performance improvement** — eliminated N+1 queries, introduced targeted indexing, and reduced API response times significantly under production load.
- Built and owned **Jenkins CI/CD pipelines** for automated builds, Docker containerization, and production releases — delivered multiple releases with zero manual deployment errors.
- Managed Azure App Service environments — configured services, monitored resource utilization, and maintained high availability for production workloads.

IP Rights Management System (Ultimatix)

Sep 2024 – Jul 2025

Tech Stack: Java, Spring Boot, PostgreSQL, Oracle, Angular v17, TypeScript, Azure, Jenkins, Git

- Designed and built backend services for Patent and Trademark lifecycle modules — engineered complex multi-stage approval workflows (IDF, trademark review) with full audit trail and state management.
- Built a stage-aware email notification system with group email support — automated approval-stage triggers, reducing manual follow-ups and improving workflow transparency across teams.
- Optimized **7+ critical APIs** achieving **30x performance improvement** — refactored inefficient queries, eliminated redundant database calls, and improved system responsiveness under concurrent load.
- Upgraded Angular frontend from **v17 to LTS v20** — resolved breaking changes, updated dependency chains, and ensured zero-disruption migration for active users.
- Worked across **Oracle and PostgreSQL** databases — designed normalized schemas, authored complex joins and aggregations, and managed data migrations across dev, staging, and production environments.
- Collaborated with product, QA, and DevOps teams to gather requirements, align on acceptance criteria, and ship features reliably on scheduled release cycles.

PERSONAL PROJECTS

JobFit.AI – AI-Powered Job Matching Platform [GitHub](#)

Tech Stack: Spring Boot | React.js | PostgreSQL | OpenAI API | Kafka | Redis | Elasticsearch

- Architected a distributed microservices system with Spring Boot backend, Kafka-based async job aggregation, Redis caching, and Elasticsearch for full-text search — designed for horizontal scalability and fault tolerance.
- Implemented **OAuth2 + JWT authentication** with Google OAuth integration — enforcing secure, stateless API access across services.
- Built an AI resume-to-job matching engine using OpenAI embeddings and cosine similarity with **75%+ match accuracy** — stored embeddings using pgvector in PostgreSQL with multi-dimensional scoring across skills, experience, and semantics.
- Developed a resume gap analysis engine using GPT-4 — provides actionable skill improvement suggestions with before/after match score simulation.

EDUCATION

B.Tech in Electronics & Communication Engineering (CS Fundamentals)

2020 – 2024

Maulana Abul Kalam Azad University of Technology (MAKAUT), Kolkata

CGPA: 8.79/10

CERTIFICATIONS & ACHIEVEMENTS

- **TCS DEEP Ninja Certified DevOps Engineer** — specialized in Docker containerization, Jenkins CI/CD orchestration, and cloud deployment pipelines.
- Solved **600+** algorithmic problems across LeetCode and Codeforces — strong foundations in data structures, system design, and computational problem solving.