

Aritra Dutta

Full Stack Application Engineer

📞 +91 62956 99190 | ✉ aritradutta049@gmail.com | 📍 Bhubaneswar, India
🌐 LinkedIn | 🏠 GitHub | 📄 LeetCode | 🌐 aritrodutta.tech

Professional Summary

Results-driven Full Stack Application Engineer with 2+ years of experience building scalable Java microservices, end-to-end web applications, and AI-powered features. Proficient in Java, Spring Boot, Python, Generative AI (RAG/LangChain), React, and AWS — with a strong focus on backend modernization and intelligent system integration, delivering measurable performance improvements in enterprise, client-facing environments.

Work Experience

Tata Consultancy Services (TCS)

System Engineer

Sep 2024 – Present

Bhubaneswar, India

► Element Fleet Management

Application Developer

Apr 2026 – Present

- * Led the remediation phase of a Java microservices modernization initiative, migrating backend services from Java 8 to Java 21 and Spring Boot 1.x to 3.x to improve maintainability and long-term support.
- * Migrated critical infrastructure from a legacy JBoss server to Azure Tomcat PaaS, configuring health checks to ensure high availability in production.
- * Refactored the iDeclare module from a legacy monolith into a standalone Spring Boot microservice with a dedicated login portal, implementing Spring Security for JWT-based role-level access control.
- * Used **AWS Transform** to streamline dependency upgrades, code refactoring, and compatibility validation across Java microservices on AWS VM-based infrastructure.
- * Built end-to-end Jenkins CI/CD pipelines with Docker deployments; authored **2,000+ JUnit test cases** to strengthen release quality.
- * Optimized SQL queries and APIs, achieving up to **20× faster response times** in critical production workflows.
- * Leveraged **GitHub Copilot** to accelerate code generation and peer review, improving developer productivity across microservice refactoring tasks.
- * Collaborated with cross-functional teams in Agile ceremonies (sprint planning, stand-ups, retrospectives) using **Jira** and **Jile** for delivery tracking and backlog management.

► Ultimatrix Platform

Application Developer

Sep 2024 – Mar 2026

- * Executed a database migration from Oracle to PostgreSQL, redesigning normalized schemas and reducing redundant query calls.
- * Built backend services for patent and trademark lifecycle modules using Core Java and Spring Boot, including multi-stage approval workflows and audit trails.
- * Troubleshooted and optimized 7+ critical APIs, achieving up to **30× performance improvement** under production load.
- * Conducted technical interviews and led knowledge-transfer sessions to onboard new team members.
- * Participated in daily Agile stand-ups, sprint planning, and retrospectives; used **Jile** for backlog management and sprint delivery tracking.

Projects

AlgoGuru | Full-Stack Developer | [algoguru](#)

- Designed, built, and deployed a full-stack competitive programming learning platform end-to-end, including production deployment and custom domain configuration.
- Integrated a Generative AI-powered **Guru Bot** using Python, LangChain, and **RAG (Retrieval-Augmented Generation)** to deliver context-aware algorithm explanations and intelligent, document-grounded problem-solving assistance.
- Built a Java-based code playground with role-based authentication, user progress tracking, and interactive problem sets using React, TypeScript, Tailwind CSS, and Supabase.
- Owned the complete product lifecycle — architecture, AI integration, implementation, deployment, and ongoing maintenance.

Technologies: React, TypeScript, Tailwind CSS, Java, Python, LangChain, RAG, Supabase, Generative AI

Education

Maulana Abul Kalam Azad University of Technology (MAKAUT)

B.Tech, Electronics & Communication Engineering

2020 – 2024

CGPA: 8.79/10 | Kolkata, India

Technical Skills

Programming Languages: Java, Python, TypeScript, SQL

Frameworks & Libraries: Spring Boot, Spring MVC, Spring Security, Spring Data JPA, Hibernate, REST APIs, Microservices, LangChain, React, Angular, Tailwind CSS

AI & Generative AI: Generative AI, RAG (Retrieval-Augmented Generation), LangChain, LLM Integration

Databases: PostgreSQL, Oracle, MySQL, Apache Kafka

Tools & Platforms: AWS, AWS Transform, Azure PaaS, Docker, Jenkins, Git, Maven, SonarQube, Tomcat, JBoss, GitHub Copilot, CI/CD

Soft Skills: Agile, Scrum, Jira, Jile, Code Review

Languages: English, Hindi, Bengali

Awards & Achievements

- Solved **700+ problems** across competitive programming platforms — LeetCode (**1672**), Codeforces (**1046**), CodeChef (**1708**, **3-Star**), and CSES Problem Set.