RISHIKESH DAS

Software Engineer (2027 Graduate) | Java Backend and REST APIs | Fraud/Anomaly Detection | AI-Integrated Systems
Asansol, West Bengal | +91-6297799544 | rishikeshdas788@gmail.com | linkedin.com/in/rishikesh-das000 | github.com/rishikeshdas887

SUMMARY

Software engineer (B.Tech, graduating Jun 2027) with 2 internships and 4 shipped projects, building reliable backend systems in Java (Spring Boot) and JavaScript with REST APIs, JSON, HTTP error handling, idempotency, JWT authentication and SQL. Experienced across the full SDLC: technical design, implementation, debugging, code review, unit testing, documentation and Docker-based releases. Built transaction flows (deposit, withdraw, transfer) with fraud (anomaly) detection, and AI-integrated systems (LLM, RAG, NLP) that validate model output with confidence thresholds. Collaborative in Agile teams and independent on solo builds (72-hour hackathon project, ranked #62 of 194). 100 DSA problems solved; 98.19 percentile, Naukri Campus Young Turks 2026.

TECHNICAL SKILLS

Languages: Java, JavaScript (ES6+), Python, SQL, C, HTML5, CSS3
Backend and APIs: Spring Boot, Spring Security, Spring Data JPA, Hibernate, REST API Design, HTTP (GET/POST/PUT/DELETE), JSON, Status Codes and Error Handling, Idempotency, JWT Authentication, Role-Based Access Control, Swagger/OpenAPI, Microservices, Service-to-Service HTTP, FastAPI, Node.js, Express.js
Databases: PostgreSQL, MySQL, Oracle, SQL Server, SQLite, SQLAlchemy, Stored Procedures, Relational Schema Design
Testing and Reliability: JUnit, Mockito, JaCoCo, Pytest, Unit Testing, API Testing, Debugging, Code Review, Automated Verification, Spring Boot Actuator (observability)
Tools and Release: Git, GitHub, Docker, Docker Compose, Nginx, Linux, Maven, Documentation, Safe Deployment via Containerized Releases
Frontend: React.js, Vite, ESLint, Next.js, Tailwind CSS
AI and Edge: LLM Integration, RAG, NLP, Anomaly Detection, Scikit-learn, Computer Vision, MQTT, ESP32, Raspberry Pi
Fundamentals: Data Structures and Algorithms, Object-Oriented Programming, System Design, SDLC, Agile

WORK EXPERIENCE

AI Agents Intern | EWB Courses (EWB Edu Tech Pvt. Ltd.) | Virtual | Sep 2026 – Oct 2026
- Learned an unfamiliar stack independently and delivered a Student Management REST API (Python, FastAPI) across the full SDLC: all 4 CRUD operations, Pydantic request validation, and consistent JSON/HTTP error responses.
- Built the SQL data layer with SQLAlchemy ORM; wrote automated unit and API tests in Pytest, verified every endpoint through Swagger UI (OpenAPI), documented the API and managed releases with Git/GitHub.

AI and Embedded Systems Developer Intern | Plumule Research LLP | Durgapur, West Bengal | Feb 2026 – Apr 2026
- Designed, built, tested and deployed a real-time computer vision object detection system on Raspberry Pi, reducing edge inference latency by 35% without cloud dependency.
- Integrated it with an ESP32 over MQTT for automated hardware actuation (2 edge devices, end to end); shipped version-controlled releases across 10+ GitHub commits.
- Collaborated with engineers in an Agile team, presented technical demos to stakeholders and achieved 100% on-time sprint completion.

PROJECTS

AI-Powered Bank Management System: Spring Boot Backend and React Frontend | 2026
Java, Spring Boot, Spring Security, JWT, Spring Data JPA, Hibernate, PostgreSQL, REST API, Python FastAPI, React.js, Docker
- Designed a scalable, testable banking platform as a monorepo: Spring Boot REST backend with 5 layers (controller, service, repository, security, AI integration), a React (Vite) client and a system-design diagram.
- Built 3 core money-movement flows (deposit, withdraw, transfer) with JWT authentication, DTO and Bean Validation, global exception handling and Actuator monitoring; modelled 6 PostgreSQL tables (users, accounts, transactions, cards, loan_applications, ai_logs).
- Integrated a Python FastAPI AI microservice over HTTP/JSON delivering 4 features: spending analysis, fraud (anomaly) detection, AI assistant and personalized recommendations; containerized with Docker.

JudgeForge (Hack The Dog): Hackathon Management Platform | 2026
Java, Spring Boot, REST API, SQL, JUnit, Mockito, React.js, Vite, Nginx, Docker Compose, Git
- Led and built solo in 72 hours: Spring Boot RESTful backend with React.js frontend (event creation, team formation, mobile judge interface); ranked #62 of 194 projects (top 32%), 3.801/5 from 3 human and 5 AI judges.
- Wrote 26 @Test methods across 7 test classes (JUnit, Mockito); automated verification script passing 7/7 checks; Docker Compose single-command deployment; released as MIT-licensed open source with documentation.

SentinelEdge: AI-Powered IoT Predictive Maintenance and Safety System | 2026 · In Progress
ESP32, MQTT, Python, RAG, LLM, React.js, Docker Compose
- Engineered an event-driven pipeline: ESP32 fuses 4 sensor channels and streams telemetry over MQTT to an anomaly-detection pipeline with a RAG + LLM diagnosis engine (3 outputs: fault classification, root cause, maintenance recommendations); autonomous relay shutdown with incident logging across a 6-stage workflow; React dashboard with 4 modules.

AppleSupport Customer Support Chatbot | Sep 2026
- Built a Python FastAPI REST API (POST /predict) serving a TF-IDF + Logistic Regression NLP model trained on 105,941 cleaned samples (84,752 train / 21,189 validation) from the 2.81M-tweet TWCS corpus, with a ~0.35 confidence-threshold escalation layer to validate predictions; React (Vite) client.

EDUCATION

B.Tech, Electronics and Communication Engineering | NSHM Knowledge Campus, Durgapur | Aug 2023 – Jun 2027 | CGPA: 7.0 (up to 6th semester)
AISSCE (Class XII), Science | Asansol North Point School | Mar 2023 | 60% • AISSE (Class X) | Chanda South End Model School | Mar 2021 | 94.4%

CERTIFICATIONS AND ACHIEVEMENTS

- Naukri Campus Young Turks 2026 (HCLTech): Certificate of Merit, 98.19 percentile, Oct 2026
- DOGFOOD 2026 Hackathon (Hackathon Raptors): solo 72-hour build, #62 of 194, 3.801/5 | Adobe University Hackathon 2026 (Adobe x Unstop): national-level participation
- 100 DSA problems solved (LeetCode and GeeksforGeeks) | Internship Completion Certificate, EWB Courses, Oct 2026 (EWB/INT/2026/0874)