

KRISH KANT RAI

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[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

Summary

Full Stack Java Developer skilled in Spring Boot, React.js, and MySQL — builds secure REST APIs with JWT authentication and RBAC. Delivers production-grade platforms spanning RAG pipelines and blockchain integration, pairing solid backend architecture with clean frontend design.

Education

Bachelor of Technology in Computer Science Engineering

2024-2027

KIET Group of Institutions, Delhi-NCR

73.47%

Diploma in Computer Science Engineering

2021-2024

Government Polytechnic, Kanpur Dehat

70.88%

Experience

Infosys Springboard Internship 6.0 – Virtual Intern

Mar 2026 – May 2026

Project: Site Survey Tool for Internet Service Providers (ISP)

Remote

- Engineered multi-tenant ISP site-survey platform using Spring Boot, React.js, and MySQL, structuring hierarchy across properties, buildings, floors, and spaces.
- Secured REST APIs with Spring Security and JWT authentication, enforcing role-based access control for Admin, Engineer, and Customer roles across the platform.
- Designed interactive SVG floor canvas rendering live RF signal heatmaps (-30 to -90 dBm) from Vistumbler and Kismet scan uploads for field engineers.
- Automated asynchronous PDF report generation aggregating floor plans, equipment inventory, checklists, and survey coverage data for each property.

Technical Skills

Languages: Java, Python

Backend & APIs: Spring Boot, REST APIs, Spring Security, JWT

Frontend: React.js, Tailwind CSS, MapLibre GL

Databases: MySQL, Vector Databases

AI & GenAI: LangChain, RAG, Vector Embeddings, Ollama

Tools: Git, GitHub, Docker, Maven, Postman

Libraries: iText 7, Java2D, Apache Commons CSV

Projects

[StackForge](#) | Java, Vector Database, RAG, Ollama

June 2026 – Sep 2026

- Developed zero-dependency vector database in Java implementing HNSW, KD-Tree, and Brute-Force nearest-neighbor search behind one REST API.
- Optimized multilayer HNSW graph from scratch with ef.construction=200 and bidirectional linking across Cosine, Euclidean, and Manhattan distance metrics.
- Integrated RAG pipeline on Ollama using nomic-embed-text and Llama 3.2, generating 768D embeddings with overlapping chunking and top-3 retrieval.
- Deployed custom HTTP server with CRUD and benchmark endpoints, plus live PCA-based 2D scatter visualization of semantic clusters across categories.

[FarmXchange Application](#) | Spring Boot, React.js, MySQL, JWT

Dec 2025 – Jan 2026

- Authored blockchain-based crop-traceability platform using Spring Boot, React.js, and MySQL with Solidity smart contracts via Web3.js.
- Orchestrated five-role JWT authentication system for Farmer, Distributor, Retailer, Consumer, and Admin with admin-gated farmer verification.
- Established CropRegistry.sol smart contract recording crop origin and ownership immutably on-chain, exposed through REST endpoints.
- Crafted wallet-based order pipeline with live status tracking from PENDING through DELIVERED for seamless buyer-seller transactions.

Achievements

AWS Certified Cloud Practitioner : Amazon Web Services, Mar 2026

Data Structures and Algorithms : Solved 400+ problems on LeetCode. [LeetCode Profile](#)