

Subham Maity

SDE Aspirant
Java Developer
Exploring Gen AI Solutions

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github.com/Encryption-prince
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EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech, IT	Techno Main Salt Lake, Kolkata	8.24	2026
ISC	CISCE	95.75%	2022
ICSE	CISCE	95.2%	2020

PROJECTS

- **N.I.R.V.A.N.A: RAG-Powered Clinical Biofeedback Engine**  Apr 2026
Tools: Java, Spring AI, Llama 3.1 8B, Qdrant Vector DB, Ollama, Apache Tika, REST APIs 
 - Engineered a **real-time RAG pipeline** converting live **EEG metrics into semantic queries** across 100+ papers, delivering **hallucination-free clinical insights**.
 - Integrated a **quantized Llama 3.1 8B model** via **zero-shot prompting** to **interpret physiological data** (Alpha, Beta, BPM) strictly through **retrieved literature**.
 - Architected a **fault-tolerant document ingestion service** with **token-optimized chunking** to **prevent context overflow**, ensuring **high-accuracy multi-document retrieval**.
- **FloraMed : A Virtual Herbal Garden**  May 2025
Tools: Spring Boot, OAuth 2.0, JWT, Razorpay API, Swagger, Hibernate, PostgreSQL, Supabase, Koyeb 
 - Engineered a scalable backend system handling **50+ RESTful endpoints** for herbal data, user management, and order processing, **reducing average API response time to under 200ms**.
 - Implemented **JWT and OAuth 2.0** role-based authorization for **3 distinct user roles**.
 - Automated the purchase-to-order workflow by integrating the **Razorpay API**, **eliminating all manual payment handling and improving operational efficiency**.
 - Added a **recommendation system** using **SQL** to suggest relevant products based on user interaction.
- **OneTap : End-to-End Encrypted One-Time File Sharing**  Aug 2025
Tools: Spring Boot, PostgreSQL, Redis, Hibernate, REST API, Docker, AES-GCM Encryption 
 - Developed a **secure backend service** that provided **one-time access** to multi-format files with **auto-deletion after first view**, ensuring **100% non-retention** of plaintext data.
 - Applied **client-side AES-GCM encryption** across file uploads and downloads, **eliminating backend visibility** into sensitive user data and strengthening end-to-end security.
 - Optimized storage performance by integrating **Redis with TTL** for fast retrieval and automated expiry, **reducing access latency** while maintaining metadata synchronization in **PostgreSQL**.

TECHNICAL SKILLS

- **Programming Languages**: C, Java, Dart, Javascript
- **Technologies**: Spring Boot, Hibernate, REST API, Razorpay API, Swagger, OAuth 2.0, Twilio, Redis, Junit, Mockito, React JS, Spring AI, Kafka, MCP, JWT, RAG
- **Tools & Databases**: IntelliJ IDEA, VS Code, Git, GitHub, CI/CD, Maven, PostgreSQL, MariaDB, Postman
- **Deployment & Cloud**: Docker, AWS, Koyeb, Railway, Qdrant

PUBLICATIONS

- **A Virtual Botanical Ecosystem Featuring Herbal Knowledge With Modern Technology For Fostering Education With User Engagement For Natural Wellness** Dec 2025
7th International Conference on Research in Computational Intelligence and Communication Networks (IEEE)

ACHIEVEMENTS

- **Computer Science Project Contest 1st Runner Up** - Arranged by ACM, Kolkata 2026
- **Project Competition Winner** - Arranged by InspirIT, TMSL 2025
- **Convolution Competitive Programming Finalist** - Organized by Jadavpur University 2025
- **Aminovate Hackathon Winner** - Organized by Amity University 2024

CERTIFICATIONS

- **Java Spring Framework 6 with Spring Boot 3**, [Certificate Link](#) Apr 2025