

Jay Dosi

+91-8619388001 | Jaipur, Rajasthan, India | jayofficial158@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

EXPERIENCE

SDE Intern, Mentox Technologies Pvt. Ltd.

Jan'26 – Jul'26

- Designed and built an **ERP migration framework** from scratch, architecting reusable **integration layers** and core modules used by system integrators across ERP platform transitions.
- Led development from requirements gathering through deployment, building reusable migration components and integration abstractions for cross-platform ERP transitions.

Research Consultant, WorldQuant Brain

Apr'26 – Present

- Research and submit **quantitative alphas** on WorldQuant Brain using **statistical modeling**, factor research, and time-series analysis to develop systematic trading strategies.

Executive, Training and Placement Cell (TPC)

Mar'25 – Present

- Coordinate campus **placement drives** and **internship cycles** with industry partners; organize mock interviews and resume-building sessions for students.

SDE Intern, Chambal Fertilisers and Chemical Limited (CFCL)

May'25 – Jul'25

- Developed a **SAP MM module** extending the internal **Procure-to-Pay (P2P) workflow** for enterprise-wide use, performing **end-to-end system integration** analysis across transaction flows.
- Documented data handoffs between modules and authored onboarding material, accelerating employee adoption of the new workflow.

PROJECTS

Historical Market Replay Engine | *Java, Spring Boot, TimescaleDB, React, TS* [\[GitHub\]](#) [\[Live Demo\]](#)

May'26 – Jun'26

- Built a **multithreaded WebSocket engine** with **Spring Boot 3** and a **ScheduledExecutorService** to replay OHLCV market ticks at configurable speed multipliers.
- Designed a **keyset-paginated** buffer service backed by a **ConcurrentLinkedQueue** for zero-stall, thread-safe streaming across billion-row **TimescaleDB** hypertables.
- Integrated the **Yahoo Finance API** with an in-memory paper-trading engine and a **React + TypeScript** frontend with custom SVG candlestick charts; containerized with **Docker Compose**.

LowKey Secure | *FastAPI, JWT, RBAC, SQLite* [\[GitHub\]](#) [\[Live Demo\]](#)

Dec'25 – Feb'26

- Designed an **8-table relational schema** with endpoint-level **RBAC**, implementing **JWT (HS256)**, **bcrypt** hashing, and **RSA-256** signed credentials for secure identity management.
- Built an event approval workflow featuring mandatory risk justification, cascading user management, **SHA-256** anonymized attendance, and a comprehensive audit trail.

Nyay-Sahayak | *FastAPI, Neo4j, ChromaDB, Docker, Microservices* [\[GitHub\]](#)

Aug'25 – Oct'25

- Architected a **5-service microservices system** (scraper, ingestion, RAG, fact-checker, API gateway) for automated legal document analysis, orchestrated with **Docker Compose**.
- Built an ingestion pipeline performing NLP argument mining, populating a **ChromaDB** vector store and a **Neo4j** graph database to serve two distinct data access patterns.
- Designed a **FastAPI RAG service** with a dedicated fact-checker microservice for semantic verification; built a **React + Tailwind CSS** frontend with knowledge-graph visualization.

EDUCATION

The LNM Institute of Information Technology

Jaipur, Rajasthan, India

B.Tech, Communication and Computer Engineering

Aug'24 – Jun'28

SKILLS

Languages: Java, Python, Golang, TypeScript, JavaScript, SQL, C, HTML, CSS.

Backend: Spring Boot, FastAPI, REST APIs, Microservices, WebSockets, Concurrency, Multithreading, Flask, Django.

Frontend: React, TypeScript, Tailwind CSS, Vite.

Databases & Storage: PostgreSQL, TimescaleDB, SQLite, Neo4j, ChromaDB, Query Optimization, Keyset Pagination.

Security & Auth: JWT, bcrypt, RSA-256, RBAC.

DevOps & Tools: Docker, Docker Compose, Git, GitHub, Linux/CLI.

ACHIEVEMENTS

- World Ranked Top 300**, IMC Prosperity 4 (Manual Trading Section).
- AIR Top 30** – National Quant Finance Olympiad.
- WorldQuant Brain Challenge[®]** – Gold Level.
- 2nd Runner-up** out of 25,000+ teams, Vibe-Hacks 2.0 – finale at Google HQ, Gurugram.
- Active open source contributor with **28+ merged PRs** across IntelOwl, GoFr, and others.
- Selected for **GoFr Summer of Code 2025**.
- Winner**, Coding Competition (Innovate & Inspire S13), outperforming 700+ candidates.