

# Shivam Chaubey

Mumbai, India | 9321664428 | [shivamchaubey027@gmail.com](mailto:shivamchaubey027@gmail.com) | [Github](#) | [Portfolio](#)

---

Self-driven engineering student with hands-on experience in backend development, data science, and full-stack prototyping. Skilled in Python, Java, and JavaScript. Passionate about building ML-powered tools with clean UI, strong logic, and real-world impact.

## Projects

---

### **Train Booking System** - Java, Gradle, Jackson, BCrypt, JSON

[Link](#)

*Built a full-featured CLI app to simulate a train booking system without using any database.*

- Engineered **7+ core features from scratch**, including secure user authentication, train search, 2D matrix-based seat selection, and ticket lifecycle management (booking/cancellation).
- Developed a custom persistence layer to manage **4 distinct data entities** (Users, Trains, Tickets, Seats) using the Jackson library for JSON serialization, completely eliminating the need for a traditional database.
- Architected the application using clean OOP principles and a **modular, service-oriented design** to separate business logic and data handling effectively.

### **Portfolio Optimization System** -Python, yFinance, Keras, LSTM, Scikit-learn, Pandas, Plotly

[Link](#)

*Built a deep learning-based tool to forecast stock prices and optimize portfolio returns.*

- Trained and validated an LSTM time-series model on historical data for **10 global stocks** to forecast future returns for the optimization pipeline.
- Achieved Markowitz return of 13.37%** with 21.03% volatility; the model-projected return was **52.08% at 1.325% risk**.
- Developed **3+ distinct visualizations** using Plotly and Seaborn to illustrate the efficient frontier, optimal portfolio weights, and risk-return trade-offs.

### **Novara Marketplace** - React 18, TypeScript, Express.js, Drizzle ORM, Tailwind CSS

[Link](#)

*Developed a web app for buying/selling academic prep books with integrated blog features.*

- Built and deployed a full-stack application with a custom Express.js back-end featuring **15+ API endpoints** for authentication, content management, and user data.
- Engineered a type-safe frontend with **10+ responsive pages and components** using React and TypeScript, implementing protected routes with the Wouter library.
- Enabled full CRUD operations for **2 major features** (books and blogs) by architecting a database schema and writing type-safe queries with Drizzle ORM

## Education

---

**Mumbai University | B. E. in CSE (AI & ML)**

Mumbai, India | Sept 2022- June 2026

***Relevant Coursework:** DS, Algorithms, DBMS, OS, Web Computing, AI, ML, CN, Data Analysis*

## Skills

---

**Languages:** Java, C++, Python, JavaScript, TypeScript

**Frameworks/Libraries:** React.js, Tailwind CSS, Keras, LSTM, Jackson, BCrypt, Express.js, Drizzle ORM, Zod, Vite

**Tools:** Gradle, Netlify, Git, SciPy, Pandas, NumPy,

**Concepts:** OOP, File Handling, JSON Parsing, Authentication, Data Visualization, Portfolio Optimization, Time Series Forecasting, CRUD Operations