

# Manan Kumar

✉ 04manank@gmail.com

☎ +91 8851173040

🌐 LinkedIn

🐙 GitHub

📁 LeetCode


## Professional Summary

Software Engineering student skilled in **Full-Stack Development** and **Applied Machine Learning**, with experience developing **secure, scalable web applications** and deploying **production-ready ML models**. Strong problem-solver with a solid foundation in **algorithms**, backend performance optimization, and **data-driven analysis**. Driven by curiosity, hands-on experimentation, and continuous learning across systems, data, and AI.

## Education

<b>B.Tech in Software Engineering</b> — Delhi Technological University (DTU), New Delhi	<b>CGPA: 7.64 (2022–2026)</b>
<b>Class XII (CBSE)</b> — Sachdeva Public School	<b>Percentage: 88.8% (2022)</b>
<b>Class X (CBSE)</b> — Sachdeva Public School	<b>Percentage: 91.2% (2020)</b>

## Projects

**InvestMate — AI-Powered Portfolio Tracker** (Jun 2025 – Present)  

*Tech Stack: React, Node.js, Express.js, MongoDB, JWT, Chart.js, Recharts, Gemini API, Tailwind CSS*

- Engineered a secure MERN web platform for **100+ users**, implementing **Google OAuth** and **JWT-based authentication**.
- Designed an optimized **MongoDB schema** enabling **<70ms** real-time portfolio updates.
- Integrated **3+ live INR market APIs** to track **1000+ stock and crypto assets** in real time.
- Leveraged **Gemini API** to generate **AI-driven investment recommendations**, improving decision clarity by **~80%**.
- Visualized portfolio insights using **Chart.js** and **Recharts** (trendlines, P/L graphs, asset distribution).

**Crop Yield Prediction & Fertilizer Recommender** (Apr 2025 – May 2025)  

*Tech Stack: Python, scikit-learn, NumPy, Pandas, Streamlit, Google Drive API (gdown)*

- Developed a regression model ( $R^2 = 0.91$ ) to predict crop yield using **soil, rainfall, and climate-based environmental features**.
- Implemented **preprocessing and feature-encoding pipelines** to produce clean, standardized model inputs.
- Built an **explainable rule-based fertilizer recommendation module** providing **practical advisory outputs**.
- **Implemented and deployed** an interactive **Streamlit web app** supporting real-time predictions and scenario testing.
- Utilized **Google Drive API (gdown)** for lightweight **cloud-based model storage and on-demand loading**.

**Tour & Travel App UI** (Jan 2025 – Feb 2025) 

*Tech Stack: React.js, HTML, CSS, Tailwind CSS*

- Designed a responsive **React UI** showcasing **30+ destinations** with custom card components and modal interactions.
- Achieved **90%+ Lighthouse** performance and accessibility scores.
- Built a **mobile-first layout** using responsive grid patterns for consistent experience across devices.

## Technical Skills

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

**Frontend:** React.js, Next.js, HTML5, CSS3, Tailwind CSS

**Backend:** Node.js, Express.js, REST APIs, JWT Authentication

**Databases:** MongoDB, MySQL, Firebase




**AI/ML:** Machine Learning, Neural Networks, TensorFlow, Scikit-learn, Pandas, NumPy, Prompt Engineering, Model Deployment

**Tools:** Git, GitHub, VS Code, Bootstrap, Generative AI, Power BI

**Core Subjects:** DSA (C++), OOP, OS, DBMS, CN

**Core Skills:** Software Development, Algorithmic Problem-Solving, Leadership, Team Collaboration

## Achievements & Certifications

- Solved **400+ DSA** problems; ranked in the **Top 10% globally**.
- **1650+ LeetCode** contest rating; ranked **Top 20% globally**.
- **Machine Learning Certification (Stanford & DeepLearning.AI)**  
- **Prompting Essentials Certification (Google)** 
- **Meta Full-Stack Developer Professional Certificate**
- **Attained AIR 15,233** in JEE Mains; scored **98 in Math** and **94 in Physics**.

## Leadership & Mentorship

**Desh Ke Mentor**, Govt. of NCT Delhi (Jan 2024 – Apr 2024)

- Mentored students (Grades 8–10), improving **academic clarity** and conceptual understanding by **~30%**.
- Conducted **1-on-1 study planning**, goal-setting, and structured learning guidance.