#### Tanvi Bansal

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in LinkedIn | ⊕ Portfolio | ♦ Leetcode

#### Education

The LNM Institute of Information Technology

B. Tech in Computer Science Engineering

Delhi Public School, Jodhpur

Higher Secondary Education

2022 - 2026

CGPA: 8.43/10

2008-2022 Intermediate: 96.8% — Matriculation: 97.0%

#### Technical Skills

- Languages: JavaScript, Python, C/C++, Java, HTML/CSS, MySQL
- Frameworks & Libraries: React.js, React Native, Node.js, Express.js, MongoDB
- Developer Tools & OS: Git, GitHub, Firebase, VS Code, Google Colab, Figma, Windows, Linux
- Coursework: Data Structures & Algorithms, Database Management Systems, Operating Systems, OOPs, Computer Networks, Game Theory, Software Engineering (SDLC and SRS)

## **Projects**

WhirlWash - Hostel Laundry Management System

Jan 2025 – Present

React Native, Firebase, JavaScript

- Engineered a comprehensive mobile application designed to serve 500+ hostel students and reduce wait times by 40%
- Implemented secure user authentication system with email verification, targeting 99% verification success rate
- Designed resource allocation algorithm projected to increase machine utilization by 35% and reduce conflicts by 70%
- Developed intuitive mobile interface with expected 95% user satisfaction based on initial prototype testing

AI Driven Decision Support System for Water Quality of River Ganga

Nov - Dec 2024

Data Processing, Data Generation, LSTM, Federated Learning, Web Development, UI/UX Design

- Integrated 10+ datasets (satellite, loT, meteorological) to predict river flow and water quality with over 72.8% accuracy.
- Used a Bidirectional LSTM model for 5-day time series forecasts of key parameters, demonstrating expertise in time series modeling, optimization, and large-scale data analysis.
- Used 20 years of historical data and live updates, enhancing prediction reliability by 40%

### **Technical Achievements**

Smart India Hackathon 2024 - National Winner

Dec 2024

Ministry of Jal Shakti Problem Statement SIH1694

Secured first place among 1500+ teams nationwide, winning cash prize of INR 1,00,000

Rajasthan Ideation Hackathon - Hack the Waste 2023

May 2023 - Jun 2023

State-level Hackathon focused on sustainable waste management

- Won first prize and cash award of INR 50,000 for developing practical waste management solution

#### Professional Experience

Teaching Assistant

Database Management Systems Lab, Operating Systems Lab, Computer Networks Lab

 Assisted students in understanding Computer Science Fundamental concepts, providing support in debugging and optimizing their solutions during the labs.

## Leadership Experience

Training, Placement and Corporate Relations Cell

May 2023 – Present

Senior Executive, LNMIIT Jaipur

Placement Coordination

- Coordinate campus recruitment processes between 50+ companies and 500+ students at LNMIIT
- Organize technical workshops and 300+ mock interviews to improve placement success rates

The Counseling and Guidance Cell Associate Coordinator, LNMIIT Jaipur

Aug 2023 – Present

Student Leadership

- Streamlined accommodation and document verification processes for 700+ students during admissions
- Conducted orientation sessions for 500+ new students on university resources and procedures 92% positive feedback rating

# Additional Experience

- DSA Proficiency: Solved 400+ problems on LeetCode and various competitive coding platforms
- Soft Skills: Leadership, Public Speaking, Team Management, Time Management, Communication