

TARANDEEP SINGH JUNEJA

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Education

Vellore Institute of Technology, Bhopal

Aug 2022 – Jun 2026

Bachelor of Technology (B.Tech), Computer Science and Engineering

CGPA: 8.40/10.0

- **Relevant Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Database Management Systems, Computer Networks, Operating Systems,

WORK EXPERIENCE

FOSSEE Summer Intern

Feb 2025 - Jun 2025

IIT Bombay

- Contributed to open source Osdag software by developing a comprehensive UI module for Plate-girder component using Python, deployed for 500+ structural engineers globally.
- Implemented complex mathematical calculations for bolted butt joint connections in structural engineering applications, processing connection configurations with 99% accuracy.
- Applied Object-Oriented Programming principles and software design patterns in Python to create modular, reusable code architecture that enhanced system maintainability by 20%.

Software Taxonomy Analyst (Freelancer)

Sep 2024

Prompt Engineer – C++ Code Classification — Outlier AI

- Analyzed and classified 100+ real-world code snippets across JavaScript, Python, and C++ using Core Foundations taxonomy (L0, L1, L2) to enhance large language model understanding of software architecture and functionality.
- Specialized in identifying and categorizing software engineering patterns, Debugging & Testing.

PROJECTS

Remote Interview Platform — Next.js 14, TypeScript, Stream API, Convex, Clerk — GitHub

Feb 2025

- Developed a comprehensive full-stack interview platform featuring real-time video conferencing, screen sharing, session recording, and interactive whiteboard capabilities for seamless remote technical interviews.
- Integrated secure user authentication using Clerk, real-time database synchronization with Convex, and responsive UI design supporting 5+ concurrent interview sessions with optimized performance.

Task Management System — React, TypeScript, Tailwind CSS — GitHub

Dec 2024

- Built an advanced task management application demonstrating core data structures implementation: Min Heap for task prioritization, Linked List for efficient task traversal, and Binary Search algorithms for optimized filtering operations.
- Implemented comprehensive features including real-time search functionality, multi-category task organization, priority-based sorting algorithms, and a fully responsive dark-mode user interface with smooth animations.

AI-Based Road Inspection System — Roboflow — GitHub

Jan 2023

- Collaborated with 10+ global developers in Omdena's AI initiative to develop an intelligent road defect detection system using deep learning and computer vision technologies for infrastructure monitoring.
- Trained and labeled 100+ high-resolution road defect images using Roboflow annotation tools for model development.

TECHNICAL SKILLS

- **Programming Languages:** C++, Python, JavaScript, SQL
- **Developer Tools & Technologies:** React, Node.js, HTML5, CSS3, REST APIs, MySQL, Convex, Git, GitHub, Postman, Data Structures & Algorithms, Object-Oriented Programming.

ACHIEVEMENTS & CERTIFICATIONS

- **Adobe GenSolve Hackathon Semifinalist** — Top 5% among 20,000+ participants nationally
- **Programming Proficiency:** Solved 500+ DSA problems across LeetCode, GeeksforGeeks, and Coding Studio
- **Amdocs Gen AI Hackathon Semifinalist** — Advanced to semifinals in AI/ML competition
- **IBM Blockchain Developer Certification** — Smart contracts and distributed systems
- **Oracle Database Developer Certification** — Query optimization and database design