Ashwani Singh
Mirzapur, Uttar Pradesh 231001
ashwanisingh1304@gmail.com | +91 9305937181 | GitHub | LinkedIn | LeetCode

---

Education

VIT Bhopal University
B. Tech in Computer Science (Core) | 7.41 CGPA   July 2021 – August 2025
Daffodils Public School
PCM | 8.4 CGPA   June 2021

Certifications & Courses

- Applied Machine Learning in Python | Issued: Dec 2022 | Credential ID: 4L3KE682J6BC
- NPTEL: Cloud Computing | Jan 2024 – Apr 2024 | Credential ID: NPTEL24CS17S45290225130418936

Technical Skills

- Programming Languages: Java, JavaScript
- Technologies: React.js, MongoDB, Node.js, Next.js, Express.js
- Concepts: Web Development, Git & GitHub, Linux, Docker

Projects

Chess Matchmaking and Gameplay Platform | Link
Personal Project | Tech Stack: React, Node.js, TypeScript, WebSocket's, Redis, PostgreSQL

- Orchestrated the deployment of WebSocket servers, facilitating seamless bi-directional communication between players and reducing latency by 40% in move validation, resulting in a 25% boost in player satisfaction.
- Engineered real-time move queuing using Redis, achieving an average latency of 15ms per move for 5,000 concurrent users, ensuring seamless and responsive gameplay on the chess platform.
- Developed a comprehensive player rating system incorporating win rate, KDA, and average match score to provide a holistic performance evaluation, resulting in identifying the top 100 contributors.

Smart Waste Management System | Link
College Project | Tech Stack: React, Node.js, TypeScript, PostgreSQL

- Implemented real-time monitoring and automated alerts system, reducing response times by 50%.
- Optimized waste collection routes and schedules strategies, resulting in a 30% efficiency gain.
- Utilized data-driven decision-making, reducing 20% waste generation while optimizing processes.
- Applied IoT sensors for more accurate tracking and waste levels, data accuracy increased by 40%.

VIT Bhopal Chatbot | Link
Personal Project | Tech Stack: React, Node.js, Express.js, MongoDB, OpenAI API

- Developed an AI-powered chatbot using **Flask** to handle student queries related to admissions, courses, fees, and events.
- Integrated **fuzzy matching** for FAQ responses, improving accuracy and reducing manual query resolution time by **60%**.
- Implemented **Llama model inference** for complex queries, ensuring intelligent and context-aware responses.

Responsibilities & Achievements

- Graphic Designer, CrazyVITians Graphic Team
- Contributed to Photoshop, logo design, and content creation for campus events.
- Runner-Up, U-17 Zonal Handball Championship.
- Participated in gaming tournaments at VIT Bhopal's Gamers Arena, which drew over 200 participants and increased event visibility across campus.

Languages

- English: Fluent
- Hindi: Fluent (Native)