

EDUCATION

- **VIT Bhopal University** 2021 – Present
B.Tech in Computer Science and Engineering (CSE)
– CGPA: 7.52/10
Bhopal, India
- **Daffodils Public School** 2020 – 2021
12th Grade – Science (PCM)
– Percentage: 84.4%
Mirzapur, India

PROJECTS

- **Chess Matchmaking App**
Personal project | Tech Stack: React, Chess.js, Node.js, TypeScript, WebSockets, 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.
 - Established a detailed player ranking algorithm utilizing win rate, KDA, and average match score for complete performance analysis, identifying the top 100 players out of the **500 registered users**.
- **Smart Waste Management System**
Personal project | Tech Stack: React, Node.js, TypeScript, PostgreSQL
 - **Real-time Monitoring and Automated Alerts:** Implemented a real-time monitoring system and automated alert system, reducing response times by 50%.
 - **Optimized Waste Collection Routes:** Developed strategies to optimize waste collection routes and schedules, resulting in a 30% efficiency gain.
 - **Data-Driven Decision Making:** Utilized data analytics to reduce waste generation by 20% while optimizing processes for improved resource management.
 - **IoT Sensor Integration:** Applied IoT sensors to accurately track waste levels, resulting in a 40% increase in data accuracy.
- **VIT Bhopal Chatbot**
College Project | Tech Stack: Python, React, Node.js, MongoDB, Express.js, TypeScript
 - Pioneered an intelligent **FAQ chatbot** for VIT Bhopal University using **Flask**, enabling seamless communication with prospective students by answering frequently asked questions.
 - Integrated fuzzy string matching with **FuzzyWuzzy** to accurately match user queries with relevant FAQ data, achieving high accuracy in answering common questions.
 - Implemented **Llama model inference** for complex queries, ensuring intelligent and context-aware responses.

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript

Technologies: React.js, MongoDB, Node.js, Next.js, Express.js

Development Concepts: Web Development, Git & GitHub, Linux, Docker

EXPERIENCE & ACHIEVEMENTS

- **Graphic Designer**, CrazyVITians Graphic Team.
- Designed **50+ graphics**, Contributed to Photoshop, logo design, and content creation for campus events.
- Participated in gaming tournaments at VIT Bhopal's Gamers Arena, which drew over 200 participants and increased event visibility across campus.
- **Finalist, GFG Jobathon CODHERS2025** (Top 5% of 1,000+ participants).
- **Runner-Up, U-17 in Zonal Handball Championship**

CERTIFICATES

- Applied Machine Learning in Python | Issued: December 2022 | Credential ID: **4L3KE682J6BC**
- NPTEL: Cloud Computing | Issued: January 2024 | Credential ID: **NPTEL24CS17S45290225130418936**