

EDUCATION

- VIT Bhopal University

B.Tech in Computer Science and Engineering (CSE)

– CGPA: 7.41/10

2021 – Present
Bhopal, India
- Daffodils Public School

12th Grade – Science (PCM)

– Percentage: 84.4%

2020 – 2021
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**