

# AMAN PATRE

Jabalpur, Madhya Pradesh | amanpatre25@gmail.com | 9685468332 | [LinkedIn](#) | [GitHub](#)

## SUMMARY

Computer Science student at VIT Bhopal with hands-on experience in the **MERN stack**. Passionate about building user-focused applications and exploring real-world problem-solving through technology. I've contributed to **open-source** projects and participated in **hackathons**, and I'm currently diving into **machine learning** to broaden my skill set and explore its practical applications.

## EDUCATION

### VIT Bhopal University

Sehore, Madhya Pradesh | 2023 – Present

B.Tech, Computer Science and Engineering

- **Current CGPA: 8.75**

### St. Aloysius Sr. Sec. School

Jabalpur, Madhya Pradesh | 2011-2023

- **12<sup>th</sup> Percentage: 84%**

## SKILLS

### Web Development:

MERN Stack (MongoDB, ExpressJS, ReactJS, NodeJS), HTML, CSS, JavaScript, Tailwind CSS, Bootstrap

### Programming Languages:

C++, Java, Python, JavaScript

### Tools & Technologies:

Git, GitHub, Postman, JWT, MongoDB Atlas, Docker(basic), Render, Multer

## PROJECTS

### FoodIn – Food Delivery Website (MERN STACK) ([LINK](#))

- Developed a full-stack food delivery platform allowing users to browse menus, place orders, and simulate payments via Stripe.
- Built an **admin panel** for managing menu items, tracking orders, and updating order statuses.
- Implemented **JWT-based authentication** and **password encryption** with bcrypt for **secure** user login.
- Handled menu image uploads using **Multer** with seamless integration into the menu management system.
- Tech Stack: **ReactJS, NodeJS, ExpressJS, MongoDB**, Tailwind CSS, JavaScript, Multer, Stripe, bcrypt, JWT, Vite.

### Roomate – Real-Time Collaboration Platform (MERN STACK) ([LINK](#))

- Developed a full-stack **real-time chat app** with **project-based rooms**, **AI assistant**, and **dynamic code generation** via **WebContainers**.
- Integrated **Redis** for session management and built RESTful APIs with secured **JWT based authentication**.
- Enabled **dynamic code generation** and **execution**: Users can prompt the AI (e.g., “@ai create an Express server for me”), and the system generates, deploys, and runs code in real-time using WebContainers **within the application**.
- Tech Stack: **ReactJS, NodeJS, ExpressJS, MongoDB, Socket.io**, Redis, Vite, JavaScript, JWT, **AI Integration**, WebContainers.

## EXPERIENCE

### Intern – Digistall (May 2025 –June 2025)

- Resolved critical frontend **website issues**, improving user experience.

### Core Member – AI Club Web Team, VIT Bhopal (November 2024 – Present)

- Collaborated with team members to develop responsive club webpages and implement **event features**.

### GSSoC (GirlScript Summer of Code) Contributor (2024)

- Fixed issues, added new features, and improved documentation in **open-source** projects.

## ACHIEVEMENTS

**3rd Place Winner in College Hackathon** - Organized by a college club, developed a **UI/UX-based web page** using HTML, CSS and JavaScript showcasing the history, impacts, and milestones of the Mozilla Firefox browser.

**Top 20 Finalist out of 700+ Teams – CodeForge'25 Hackathon** - Our project “**Dynamic Route Rationalization using Machine Learning and SUMO**” was selected for the Grand Finale held at the **Microsoft Office, Gurugram, Haryana**. We developed a system that predicts congestion using **LSTM** models and dynamically **re-routes vehicles with A\* algorithm**, simulated in **SUMO**. This project showcased real-time decision-making in urban mobility and was praised for its innovation and real-world applicability.