

Aryan Gupta

aryang60923@gmail.com / [LinkedIn](#) / [Github](#)

EDUCATION

VIT Bhopal University
Bachelor of Technology in Computer Science Engineering

Aug 2022 – May 2026
CGPA : 8.86

TECHNICAL SKILLS

Programming Languages : C++, Java, Python, JavaScript, SQL, Typescript

Technologies and Frameworks: Reactjs, Nodejs, Express, Zod, Git/GitHub, Nextjs, Turborepo, PostgreSQL, Docker

Databases and Core Skills: MySQL, Mongodb, Data Structures and Algorithms

PROJECTS

Real-Time Chat Application (Feb 2024 - May 2024)

- **Designed and built** a real-time chat application using **WebSockets** with **Node.js** and **Express**, enabling instant messaging.
- user authentication with **JWT-based access control**, allowing secure logins and real-time status updates.
- **Built** group chat functionality with **dynamic room creation**, ensuring efficient communication among multiple users.
- **Optimized** real-time message delivery using **event-driven architecture**, reducing latency.
- **Integrated MongoDB** to store chat history, user profiles, and session data for seamless persistence.
- **Enhanced** front-end interactivity using **React**, ensuring a responsive and engaging user experience.
- **Key Technologies:** Node.js, Express, WebSockets, React, MongoDB, Docker, NGINX

Login and Registration Authentication System (Apr 2024 - May 2024)

- **Created** a secure **user authentication system** leveraging **Node.js**, **Express**, and **MongoDB**, ensuring smooth registration and login processes.
- **Used JWT authentication**, strengthening system security.
- **Integrated Nodemailer** for email-based password recovery, improving account accessibility.
- **Enforced** cross-origin resource sharing (**CORS**) and **secure cookie handling**, preventing security vulnerabilities.
- **Designed** an intuitive user interface with **React**, enhancing usability across multiple devices.
- **Key Technologies:** Node.js, Express, MongoDB, JWT, Nodemailer, React, AWS EC2

Collaborative Document Editing Tool (Sep 2024 - Dec)

- **Engineered** a **real-time collaborative editing platform** using **WebRTC**, **Node.js**, and **Express**, allowing multiple users to edit documents simultaneously.
- **Implemented** automatic synchronization and conflict resolution, ensuring smooth collaboration.
- **Integrated** role-based access control (RBAC) to manage user permissions securely.
- **Developed** a **version control system** to track changes, preventing data loss.
- **Optimized** performance with **server-side caching** and **WebSocket compression**, reducing bandwidth usage.
- An intuitive user dashboard with **React**, enhancing user experience with a clean and interactive UI.
- **Key Technologies:** Node.js, Express, WebRTC, React, MongoDB, Docker, Kubernetes

ACHIEVEMENTS

- **Successfully completed Hacktoberfest 2024**, contributing to open-source projects and improving collaborative coding skills.
- **Completed the 100 Days of Code challenge**, consistently solving problems and building projects to enhance programming proficiency.
- **Solved 230+ Data Structures and Algorithms (DSA) problems** on **LeetCode** and **GeeksforGeeks**, strengthening problem-solving and coding abilities.