

Rahul Verma

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EDUCATION

Indian Institute of Information Technology, Bhopal <i>B.Tech. in Electronics and Communication Engineering</i>	Expected 2026 GPA: 9.14/10
Coursework: Object-Oriented Programming, Data Structures & Algorithms, Database Management Systems, Probability & Statistics, Operating Systems, Computer Networks	

SKILLS

- **Languages:** C/C++, Python, JavaScript/TypeScript
- **Frameworks / Libraries:** React.js, Node.js, Express.js, Tailwind CSS, Material-UI, Bootstrap
- **Databases:** MongoDB, PostgreSQL, MySQL
- **DevOps:** CI/CD, Docker
- **Tools:** Git, GitHub, VS Code, Vite, Axios, React Router
- **Soft skills:** Communication, Teamwork, Responsibility

PROJECTS

ChatMitra

GitHub | Live

MongoDB, Express.js, React.js, Node.js, Socket.IO, Cloudinary, JWT, Bcrypt

- Engineered **full-stack real-time chat platform** handling **100+ concurrent connections**, optimized Cloudinary image uploads via **multipart streaming (80% payload reduction)** and socket.io broadcasting for instant message delivery.
- Implemented **enterprise-grade security**: JWT/bcrypt authentication, input validation, rate limiting, **httpOnly cookies with SameSite policy**, and OWASP compliance—mitigating XSS, CSRF, SQL injection, and DDoS vulnerabilities.
- Built **advanced real-time features**: typing indicators, read receipts, presence tracking, push notifications, and profile photo upload; achieved **responsive design** across all devices with dark/light mode support.

Job Portal

GitHub | Live

MongoDB, Express.js, React.js, Node.js

- Designed a scalable MERN-based job marketplace with optimized backend routes, reducing API latency by **35%** and improving overall workflow efficiency.
- Built responsive recruiter and candidate dashboards with real-time notifications, increasing user engagement and retention by **20%**.
- Implemented secure role-based access control (RBAC) and streamlined job application pipelines for faster job discovery and application management.

AI-Powered Interactive Story Game

GitHub | Live

Python, FastAPI, React, JavaScript, ChatGpt API

- Developed an AI-driven interactive storytelling engine using Python, enabling real-time generation of branching narratives powered by optimized prompt construction and context management.
- Implemented a stateful backend architecture using structured JSON payloads to track user choices, maintain story continuity, and compute deterministic multi-path outcomes.
- Designed a lightweight JavaScript-based frontend interfacing with the Python engine via asynchronous fetch requests, delivering low-latency interactions and dynamic rendering of AI-generated outputs.

ACHIEVEMENTS & HONORS

- Served as a **Teaching Assistant at IIIT Bhopal** (July 2023 – Dec 2023), guiding **150+ students** in **Fundamentals of Computer Science**.
- Solved **400+ Data Structures and Algorithms** problems across platforms ([LeetCode](#), [GeeksForGeeks](#)).
- Achieved a **3-star rating** on [CodeChef](#) with a **maximum rating of 1603**.
- Achieved a maximum rating of **1558** on LeetCode, ranking in the **top 29.94%** globally.
- Secured a Global Rank of **197** out of **10000+** Participants in Codechef Starters 197 (Div-3).