Akarsh Kumar

📍 Ratlam, MP, India   📞 +91 6268729559   ✉ akarshkumar1412@gmail.com

in /in/Akarsh-Kumar   Akarsh1412   </> Akarsh_1412 (LeetCode)

Education

Vellore Institute of Technology, Bhopal — 2022 - 2026
Bachelor of Technology in Computer Science and Engineering

St. Joseph's Convent School, Ratlam — 2020
Class 10th CBSE Board — Percentage – 86.4%

Sant Meera Convent School, Ratlam — 2022
Class 12th State Board (MP Board) — Percentage – 80.2%

Technical Skills

Programming Languages: C, C++, Python, Java
Frontend Development: HTML, JavaScript, React.js, Redux, Tailwind CSS
Backend Development: Node.js, Express.js, REST APIs, Socket.io, Ably
Databases: MySQL, PostgreSQL, MongoDB, Firebase
Coursework: Data Structures and Algorithms, Operating Systems, Computer Networks, OOP, DBMS

Projects

UniSphere – Campus Event & Club Management System — GitHub — Live
Tech Stack: React.js, Node.js, Express.js, PostgreSQL, Tailwind CSS, Ably, Stripe, JWT, EmailJS

- Developed a full-stack web application for managing university clubs and events with role-based access control using JWT; built secure REST APIs for event creation, user registration, and admin operations.
- Integrated Ably to implement real-time community feeds and direct messaging between users; used EmailJS to send automated club announcements and event notifications.
- Implemented payment processing for event registrations using Stripe and built dynamic registration flows for both participants and volunteers with automatic role mapping and validation.
- Designed a responsive and intuitive UI using React.js and Tailwind CSS; optimized backend operations using PostgreSQL indexing, query optimization, and pagination for handling large datasets.
- Built an admin panel with attendance tracking functionality, enabling post-event updates for both volunteers and participants and ensuring accurate record maintenance.

KeyFury — GitHub, Live
Tech Stack: React.js, Node.js, Socket.io, Firebase, Redis, Recharts, Tailwind CSS

- Developed a multiplayer typing platform with real-time analytics using React.js for dynamic frontend rendering and Node.js for backend services.
- Implemented live player tracking showing WPM/accuracy metrics during tests using Socket.io with Redis pub/sub for low-latency data synchronization.
- Created Firebase authentication flows and integrated Recharts for performance visualization with comparative analysis of typing metrics.
- Engineered real-time chat functionality and race status updates using WebSocket connections with optimized Redis caching.
- Designed responsive UI with Tailwind CSS ensuring cross-device compatibility and accessibility compliance.

Achievements

- Solved **800+ DSA problems** on LeetCode, Codeforces, and GeeksforGeeks.
- Secured **Rank 1229** in TCS CodeVita Season 12, 2024.
- Reached **Pupil** on Codeforces (Highest rating – 1224), and **1824** contest rating on LeetCode (Top 8.18%).

Certifications

- **Bits and Bytes of Computer Networking** View Certificate — *Google — Coursera*
  Covered core networking concepts including **TCP/IP, DNS, protocols, troubleshooting, and security**.
- **Cloud Computing** — *NPTEL — IIT Kharagpur*
  Studied concepts like **virtualization, distributed computing, and service models (IaaS, PaaS, SaaS)**.