

Aditya Joshi

aditya03joshi@gmail.com | +91 9149196218 | [linkedin](#) | [github](#)

TECHNICAL SKILLS: Golang | Java | C | Redis | PostgreSQL | MySQL | MongoDB | Apache Kafka | Docker | Kubernetes

EDUCATION

Bachelor of Technology in Computer Science

VIT Bhopal University, Sehore | CGPA: 8.41

September 2022 – Present

Higher Secondary Education (12th)

UCSS, Kaladhungi(Nainital) | Percentage: 88.4%

March 2022

Secondary Education (10th)

UCSS, Kaladhungi(Nainital) | Percentage: 94%

March 2020

PROFESSIONAL EXPERIENCE

Founder and President

BashCraft Club, VIT Bhopal | December 2024 – Present

- Built a 50-member team and organized events with 600+ participants.
- Hosted a podcast with a Senior Staff Engineer at Google on system design, LLMs, and real-world engineering, with 100+ participants.
- Organized a finance webinar with Zerodha on investment strategies and a fintech hackathon with 280+ participants.
- Served as a board member of BashCraft, created 5 teams, and was elected president twice.

PROJECTS

TCP/IP Stack [[Link](#)]

- Developed a TCP/IP stack in C to simulate a multi-node network topology with interconnected routers and switches.
- Implemented core networking protocols: ARP (L2), MAC learning, IP routing (L3), and VLAN support.
- Designed a custom gthread, a doubly linked list where data is directly embedded into the linked list structure for improved performance.

Technologies: C, TCP/IP, Network Protocols (ARP/IP/VLAN)

Swaasthya: A Centralised Hospital Management System [[Link](#)]

- Engineered a hospital management system with region-based database sharding for horizontal scalability and optimized data management and containerization using Docker and Kubernetes.
- Integrated Redis for IP rate limiting and smart queue management, ensuring system stability and efficient patient appointment handling.
- Utilized Kafka for batch processing to handle large volumes of data and prevent DB transaction overload, enabling efficient data routing and real-time updates.

Technologies: Go, Kafka, Redis, PostgreSQL, Docker, Kubernetes

CO-CURRICULARS AND ACHIEVEMENTS

Smart India Hackathon 2024 - Led a team to win the internal round at VIT Bhopal University, out of 400 teams.

International Innovation Challenge 2024 - Led a team to the finals out of 600+ applicants, designing the system architecture and backend.

NPTEL Cloud Computing – Top 1% - Achieved a score of 88, ranking among the top 1% of 24,000 students in the NPTEL Cloud Computing certification

AWS Cloud Club Community Partner - Organized events on LLMs and AI in collaboration with AWS engineers from the USA, hosting sessions with 200+ participants.