# Vishal Panchal

### Full stack Software Development Engineer

#### **Technical Skills**

Languages: C++, JavaScript, HTML/CSS, Typescript, SQL

Frameworks/Libraries: React.js, Redux.js, NextJS, websockets, Prisma, Tailwind, Material-UI, shadcn UI

Databases: MySQL, MongoDB, GraphQL, Redis, PostgreSQL

Dev/Deployment: Docker, AWS(S3, EC2, ECS, ECR), Postman, Git, Github, Vercel, Netlify, Figma, Linux

## **Experience**

#### **Open Access Technology India**

Aug 2022 - July 2023

Associate Software Developer

Remote

- Led the development of a dynamic user interface using **React.js**, **TypeScript** and **Extended JavaScript** significantly improving user experience and interface responsiveness.
- Architected and implemented displays from the ground up with **JavaScript** and developed robust back-end services using **Node.js** and **C#**, interfacing with a **SQL** database to manage complex data workflows.
- Enhanced SQL query performance by **20**% through the application of non-clustered indexing techniques, resulting in faster data retrieval and processing times.
- Achieved a **15**% reduction in development costs by optimizing resource usage and employing efficient coding practices with React.js, TypeScript, and Node.js, leading to faster and more maintainable code.

## **Projects**

Vercel | • [April 2024 - present]

- Developed using Node.js, JavaScript, TypeScript, S3, Docker, ECS, Kafka, PostgreSQL, and Next.js, ensuring a robust and scalable application.
- Utilized ECR for container image management, ensuring scalable deployment and efficient resource utilization.
- Employed **AWS S3** for build storage, enhancing reliability and utilized **ECS** for dynamic container spin-up, ensuring efficient resource allocation and scalability.
- Created container images with **Docker**, deployed them to Amazon ECR, and streamed all logs to **ClickHouse** using **Kafka**, improving log management and analysis.
- Integrated Kafka and ClickHouse for real-time **log streaming**, reducing logging costs by **20**% and improving deployment speed by **25**%. This also enhanced real-time monitoring and debugging capabilities.

#### Twitter | Project Link | 😯

[April 2024 - May 2024]

- Created a Twitter using **Next.js** with user authentication, tweet posting, a following/follower system, real-time updates, and a user recommendation system.
- Utilized PostgreSQL as database and GraphQL to fetch necessary data, enhance application scalability & performance.
- Integrated **Redis** for caching expensive queries like user recommendations, improving **speed** by **30%** and reducing database **load** by **40%**.
- Deployed on **EC2** with a **load balancer** for high availability and scalability, enhancing security with CloudFront for secure connections and data integrity.
- Implemented rate limiting on tweets to prevent unnecessary strain on the database, reducing potential costs by 15% and enhancing application performance.

#### Real-Time Messenger | Project Link | 😯

[Aug 2023 - Nov 2023]

- Developed a responsive messaging app with Next.js, Tailwind, and NextAuth for authentication, using MongoDB for data storage to ensure flexibility and scalability.
- Utilized socket.io for real-time messaging and Cloudinary for efficient image uploads and content delivery.
- Implemented features including file sharing, group chat functionality, and chat room management, enhancing user interaction and collaboration.
- Conducted efficient **CRUD** operations for seamless data management, ensuring robust functionality and scalability, reducing load times by **20%**.

#### **Education and Certifications**

MCA — Computer Application
TIMT college Yamunanagar (7.5 CGPA)
Certificate — Data structure and Algorithm
Coding Ninjas — Link

Aug 2020 - Jul 2022 Yamunanagar (Haryana), India May 2023 - Sept 2023