# Hamza Nadeem Khan

# **Senior Software Engineer**

Bury, Manchester, United Kingdom | <a href="mailto:hamzanadeem.vercel.app/">hamzanadeem.vercel.app/</a> **Education:** COMSATS Institute of Information and Technology | Bachelor's of Computer Science

Language: Urdu, English(Fluent)

#### **About Me**

A seasoned Full Stack Developer with over 5 years of expertise in building high-performance, scalable applications using React.js, Node.js, TypeScript, and Tailwind CSS. Adept at crafting cloud-based solutions, optimizing performance, and designing microservices architectures. Committed to delivering innovative solutions while fostering collaboration and driving success within cross-functional teams.

# **Key Achievements**

## Vice Forex – Real-Time Trading Platform

- Built a full-stack trading system with WebSocket-based real-time market data and secure financial transactions.
- Integrated ProRealTime API and developed a modular TypeScript architecture for scalable, low-latency trading operations.

## My Home Pathway - Fintech Mortgage App

- Led front-end development of a React-based mortgage platform, improving onboarding and mobile engagement by 35%.
- Integrated Plaid for secure financial data access and built event tracking systems for user behavior analytics.

## Ex Squares - Enterprise Procurement System

- Developed a MERN stack web app supporting 100K+ daily transactions with AWS-powered scalability.
- Improved backend performance by 35%, reducing processing time and enhancing system reliability.

# Sports Streaming Platform - Live Video Infrastructure

- Built a live sports streaming platform using AWS MediaLive, S3, and CloudFront for secure, low-latency broadcasting and recording.
- Developed a Next.js + TypeScript frontend with admin dashboards, role-based access, stream monitoring, and QR-based court access.

### **Answer Campus – Academic Assistance Platform**

- Led front-end development using Next.js and Material-UI, improving user engagement by 20%.
- Built an optimized interface for streamlined academic content access and integrated GitHub Actions for CI/CD.

## **Zero Swipe – UK Job Matching App**

- Developed a cross-platform React Native application targeting UK users with two roles: employer and job seeker.
- Implemented Tinder-style swipe gestures for job matching, integrated real-time chat, and enabled secure payment functionality.
- Designed an intuitive UX to simplify job connections and improve engagement on both Android and iOS platforms.

# **Professional Journey**

Full Stack Developer | Innovage.io | April 2023- Nov 2024

- Built dynamic and interactive front-end components using React.js and Vue.js, leveraging React Context API and reusable design patterns to increase user engagement by 40%.
- Architected and optimized a microservices-based backend using Node.js (Express),
  Docker, and TypeScript, ensuring seamless communication with the React front-end and improving deployment efficiency.
- Enhanced code maintainability and reduced runtime errors by 30% through TypeScript integration within the MERN stack, ensuring robust type-checking and consistent data contracts.
- Designed and deployed high-performance RESTful APIs using Express.js and MySQL, optimizing complex queries and improving data integrity by 35%.
- Implemented Lazy Loading and Error Boundaries to enhance React-based user experiences, boosting rendering efficiency by 25%.

- Led a cross-functional Agile development team, synchronizing React-based UI development with backend API architecture, achieving a 15% improvement in delivery timelines.
- Developed a robust CI/CD pipeline using Jenkins and GitHub Actions, reducing deployment times by 70% and automating testing and integration processes.
- Engineered secure and high-performing Node.js APIs to handle transaction data, ensuring compliance with fintech regulations while providing seamless integration with third-party payment gateways.
- Applied unit and integration testing using Jest, Selenium for React and Mocha for Node.js, reducing bugs by 50% and ensuring code reliability and maintainability.
- Implemented advanced React features—including Lazy Loading and Error Boundaries to enhance user experience and improve rendering efficiency by 25%, optimizing communication with the Node.js backend.

#### Senior Full Stack Developer | Tekvill Solutions | Nov 2024- Present

- Enhanced Node.js-based microservices for scalability and reliability, leveraging Kubernetes orchestration, CI/CD pipelines, and cloud infrastructure for efficient deployment and performance.
- Designed and implemented responsive, interactive UI components using React.js, significantly elevating user satisfaction and engagement on high-traffic platforms.
- Developed scalable backend services using Node.js (Express) and MongoDB, ensuring high-performance data handling and smooth application workflows.
- Employed test-driven development methodologies with Jest and Cypress, delivering robust, bug-free code and improving system stability and performance by up to 15%.
- Optimized application performance by refining Node.js services, MongoDB queries, and React front-end workflows, achieving a 35% reduction in load times.
- Developed SaaS applications using the MERN stack, streamlining workflows and enhancing functionality for diverse business solutions.
- Enhanced MongoDB database performance by optimizing schemas and queries, ensuring data integrity and boosting efficiency by up to 25%.
- Collaborated closely with clients and stakeholders to gather requirements, provide regular updates, and align project goals with business objectives.
- Developed a healthcare app using the MERN stack, integrating advanced features like real-time appointment scheduling, interactive clinic locator, and virtual consultations to enhance patient engagement and streamline healthcare access.
- Developed single-page applications (SPAs) with React.js, improving content delivery, accessibility, and reducing overall page load times by up to 30%.
- Created RESTful and GraphQL APIs with Node.js, improving data accessibility, reducing latency, and enhancing system efficiency.

- Managed projects using Agile methodologies, ensuring timely, high-quality delivery through effective sprint planning and boosting team performance by up to 35%.
- Fostered a culture of collaboration through comprehensive documentation and best practices, increasing team efficiency by up to 25% and streamlining knowledge sharing.
- Designed and deployed full-stack e-commerce platforms using the MERN stack, integrating secure payment gateways and enhancing user experience with intuitive interfaces.
- Implemented real-time data streaming features using WebSockets and MongoDB, enabling seamless live updates and enhancing application responsiveness.
- Led a major refactoring effort to modernize legacy Node.js codebases, improving maintainability, reducing technical debt, and ensuring compliance with modern coding standards.
- Integrated third-party APIs into MERN stack applications, such as payment processing and geolocation services, to extend functionality and enhance user experience, ensuring seamless interoperability and reliability across platforms.

## **Technical Expertise**

- Front-end Development: React.js, Next.js, Redux, React Native, JavaScript/TypeScript, Tailwind CSS, Material UI, SCSS.
- **Back-end Development**: Node.js, Express.js, Nest.js, NPM, RESTful APIs, Payment methods (Stripe, PayPal, 2Checkout), User Authentication
- **Database Management**: Sequelize, MySQL, PostgreSQL, Redis, NoSQL (CouchDB, Cassandra), MongoDB, SQLite
- **DevOps**: CI/CD, Docker, Kubernetes, AWS, Git
- Project Management: Agile Development, JIRA, DevRev, Slack, Microsoft Teams
- Testing: Cypress, Jest, Selenium, ESLint, Troubleshooting
- Collaboration: Cross-Functional Teamwork, Agile Methodology
- Soft Skills: Disciplined, Well-Organized, Collaboration, Teamwork, Independent Work, Communication Skills

#### Certifications

- IBM Full-Stack JavaScript Developer IBM
- Application Development using Microservices and Serverless IBM

- Get Started with Cloud Native, DevOps, Agile, and NoSQL IBM
- Introduction to Containers with Docker, Kubernetes & OpenShift IBM
- AWS Cloud Technical Essentials **AWS**