

Ghayyas Ahmed

✉ ghayyas1ahmed@gmail.com 🔗 ghayyasahmed.vercel.app ☎ (+92) 3700713489

🌐 linkedin.com/in/ghayyas-ahmed 🐙 github.com/GhayyasAhmed 📍 Karachi, Pakistan

SUMMARY

Full-Stack Web Developer with 4 years of professional frontend experience and hands-on MERN development across production-style applications. Strong in React, Next.js, TypeScript, Node.js, Express.js, MongoDB, REST APIs, authentication, real-time systems, payments, testing, Docker, CI/CD, and AWS deployment. Experienced in building scalable applications from frontend architecture through backend services and cloud infrastructure.

PROFESSIONAL EXPERIENCE

Front-End Engineer, Kachyng Inc

Feb 2024 – Feb 2026 | *Remote*

- Optimized **Core Web Vitals** for a payment checkout application, reducing **LCP from about 2.8s to under 900ms** by restructuring the critical rendering path, deferring non-critical logic, and improving bundle loading.
- Reduced **JavaScript bundle payload by 200KB+** through **tree-shaking**, native browser APIs, **code splitting**, and **React.lazy/Suspense**, improving production application startup performance.
- Refactored a **2,500-line React module** into a **modular, flow-based architecture** with reusable components and shared UI patterns, improving maintainability across production features.
- Introduced **TypeScript strict mode** across a **React/Vite codebase**, establishing stronger type contracts for API responses, shared state, and reusable components.
- Built **Playwright E2E coverage** for critical payment and iframe workflows across desktop and mobile browsers, contributing to an **80%+ reduction in production incidents**.

Front-End Engineer, Auxin Security

Jun 2022 – Jan 2024 | *Karachi, Pakistan*

- Integrated **8+ backend services** into a centralized frontend data layer using **React, Redux Toolkit, and RTK Query**, with **caching and controlled API state management**.
- Implemented **authentication refresh handling** for concurrent API requests and **built RBAC-aware protected workflows** using **Redux Toolkit and custom React hooks**.
- Developed reusable **React and Material UI components** for dashboards, tables, forms, charts, and administrative workflows shared across **multiple SaaS applications**.
- Integrated **Socket.IO real-time events** with Redux, implementing **resilient reconnect and retry handling** for security-monitoring workflows.
- Migrated React applications from **Create React App to Vite with SWC** and supported **Docker, Nginx, and Jenkins-based deployment workflows**.

PROJECTS

Multi-Vendor E-Commerce Platform 📁, Next.js, React, TypeScript, Redux Toolkit, Node.js, Express.js, MongoDB, Mongoose, Redis, Socket.IO, Stripe, Cloudinary, Docker, Nginx, GitHub Actions, AWS EC2

- Built a **multi-role e-commerce platform** supporting **buyer, seller, and admin workflows**, including product management, cart, checkout, orders, seller operations, analytics, messaging, and notifications.
- Developed **REST APIs with Express.js, MongoDB/Mongoose, JWT authentication, role-based authorization, validation, centralized error handling, and secure HTTP-only cookie-based sessions**.
- Implemented **real-time buyer/seller messaging and notifications** using **Socket.IO** with a dedicated **socket-relay service** and **Redis-backed communication**.
- Integrated **Stripe payments, Cloudinary media storage, transactional email, Redis session/cache infrastructure, and server-side protected application workflows**.
- Deployed the complete **frontend, backend, Socket.IO relay, Redis, and self-hosted MongoDB stack** on **AWS EC2 using Docker Compose**, with **persistent database storage** and private service networking.
- Configured **Nginx as the production reverse proxy** and routed separate **frontend, API, and WebSocket domains** with **HTTPS/WSS** using **Let's Encrypt** and **Certbot**.

- Implemented **GitHub Actions CI/CD** to automatically **deploy Dockerized application services** to AWS EC2 and verify **frontend and backend health** after deployment.

Learning Management System , Next.js, TypeScript, React, Express.js, MongoDB, Mongoose, Redis, JWT, NextAuth, Google OAuth, Stripe, Cloudinary, VdoCipher

- Built a full-stack Learning Management System using **Next.js, Express.js, MongoDB, and Redis**, supporting **course discovery**, enrollment, secure content delivery, and role-based administration.
- Implemented **JWT authentication with rotating refresh tokens, Redis-backed session management**, and role-based authorization across student, instructor, and administrator workflows.
- Developed scalable REST APIs for **course management, orders, analytics, user management, and content customization**, following modular Express architecture and centralized error handling.
- Integrated **Stripe payments**, Cloudinary media storage, VdoCipher secure video delivery, and **Socket.IO notifications for complete purchase, media, and real-time communication workflows**.
- Built a responsive admin dashboard using **Redux Toolkit, RTK Query, and MUI DataGrid** for course management, user administration, and analytics.

Hotel Booking Platform , React, TypeScript, Node.js, Express.js, MongoDB, Mongoose, Clerk, Stripe, Cloudinary, TanStack Query, Tailwind CSS

- Developed a full-stack hotel booking platform using **React, Express.js, and MongoDB**, supporting hotel discovery, room reservations, booking management, and owner administration.
- Implemented **Clerk authentication** with user synchronization, protected routes, and webhook-based account lifecycle management across frontend and backend services.
- Integrated **Stripe Checkout and payment webhooks** to automate booking payment confirmation and maintain reliable booking-status synchronization.
- Built owner management features with **Express.js, Mongoose, and Cloudinary** for hotel/room CRUD operations, image uploads, booking tracking, and revenue management.
- Designed **reusable REST APIs with centralized validation and MongoDB** data models supporting reviews, availability checks, booking cancellation, and scalable backend workflows.

SKILLS

Languages: JavaScript, TypeScript

Frontend: React.js, Next.js, Redux Toolkit, RTK Query, React Hook Form, React Router, React Context API

Backend: Node.js, Express.js, REST APIs, MVC Architecture, Middleware, API Validation, Error Handling

Database & Caching: MongoDB, Mongoose, Redis

Authentication & Security: JWT, HTTP-only Cookies, OAuth, Google OAuth, NextAuth, RBAC, CORS, API Security

Real-Time: Socket.IO, WebSocket Communication, Redis Pub/Sub

Payments & Integrations: Stripe, Stripe Webhooks, Cloudinary, Nodemailer, VdoCipher

UI & Styling: Material UI, Tailwind CSS, Bootstrap, SCSS, Responsive Design, Accessibility

Testing: Playwright, Jest, React Testing Library

Build & Tooling: Vite, Webpack, SWC, npm, Git, GitHub

Deployment & DevOps: Docker, Docker Compose, Nginx, GitHub Actions, AWS EC2, Let's Encrypt, Certbot, Vercel, Railway

Architecture & Performance: Modular Architecture, Reusable Component Systems, Core Web Vitals, Lighthouse, Code Splitting, Lazy Loading, Bundle Optimization

EDUCATION

Bachelor of Science (Computer Science), NED University of Engineering and Technology

2018 – 2022 | Karachi, Pakistan