HAMZA KHAN

ASSOCIATE SOFTWARE ENGINEER – MERN

+923118688410 | hamzakhan.cs25@gmail.com | github.com/hamzakhan-std25 | Islamabad, Pakistan

PROFESSIONAL SUMMARY

Computer Science graduate (BS, 2026) with four development internships and a **MERN** final year project (**MongoDB, Express.js, React.js, Node.js**). Strong in programming fundamentals (OOP, Data Structures & Algorithms), **REST APIs**, **SQL/NoSQL databases**, and **Git/GitHub** workflows with code reviews and Agile practices. Writes clean, tested, maintainable code with Jest and Docker, with results including **30% higher semantic-match precision, 20% lower task abandonment, and 40% lower discovery latency**. Based in Islamabad and ready to contribute to a collaborative engineering team.

TECHNICAL SKILLS

Languages: JavaScript (ES6+), TypeScript, Python, Java, SQL

MERN & Frontend: MongoDB, Express.js, React.js, Node.js, Next.js, HTML5, CSS3, Tailwind CSS, Redux, Zustand, React Query

APIs & Security: REST APIs, GraphQL, WebSockets, Authentication (JWT, OAuth), RBAC, FastAPI, Zod

Databases: MongoDB, MySQL, SQL, Supabase, Firebase, Redis

Tools, Testing & Deployment: Git, GitHub, Docker, CI/CD, Jest, pytest, Postman, Vercel, Render, Linux

CS Fundamentals: Object-Oriented Programming, Data Structures & Algorithms, Operating Systems, Computer Networks, Databases

Additional: OpenAI/Gemini APIs, RAG, LangChain, Vector Search; WordPress, WooCommerce, Shopify

EDUCATION

BS Computer Science | University of Swabi, Khyber Pakhtunkhwa Sep 2022 – Jun 2026

Coursework: Data Structures & Algorithms, Object-Oriented Programming, Computer Networks, Operating Systems, Databases

Diploma of Information Technology | Gov. College of Technology Swabi Sep 2021 – Aug 2022

EXPERIENCE

Full-Stack Developer Intern | Mehdi Technologies Aug 2026 – Present

- Developed **Station Hub** web dashboards for Super Admins and Station Owners and architected **Python (FastAPI)** backends serving mobile customers, station owners, and admin operations.
- Built a full-stack **Shopify Quiz App** with **React.js, Node.js, REST APIs, and Supabase** that rewards users with a **10%** discount upon passing.
- Built a real-time **Node.js chatbot backend** with **WebSockets, LangChain, Zod, Redis, Prisma, and Supabase** to process client queries and retrieve session-based chat history.

React Developer Intern | Internee.pk Jul 2025 – Sep 2025

- Built dynamic single-page applications with **React.js, Next.js, and ES6+**, structuring reusable components and integrating **RESTful APIs** for frontend-backend data exchange.
- Participated in **code reviews** and **Agile practices** while collaborating through **Git/GitHub**; managed application state with **Zustand**.
- Improved loading performance with **code-splitting and lazy loading** and built responsive interfaces with **Tailwind CSS**.

WordPress Developer Intern | TechCreator Sep 2025 – Dec 2025

- Built and deployed responsive **WordPress and WooCommerce** websites through staging, testing, **migration, and production launch**, supporting deployment workflows.
- Implemented **payment gateways, dynamic forms, and booking funnels**; improved performance with **caching and image compression**.

Front-End Developer Intern | TechCreator Mar 2025 – Jun 2025

- **Investigated and resolved front-end issues** found during development and testing, and applied optimizations targeting **page performance and Core Web Vitals**.
- Collaborated with design and development teams on UI/UX improvements; built responsive interfaces with **HTML5, CSS3, and JavaScript** using Git/GitHub workflows.

PROJECTS

TaskConnect – Smart Services Marketplace (Final Year Project, MERN)

MongoDB · Express.js · React.js · Node.js · Tailwind · Docker · Jest · Gemini API

- Built a full-stack **MERN marketplace** with geospatial service matching, **JWT authentication**, **RBAC-protected REST API endpoints**, Stripe escrow payments, Docker containerization, and Vercel deployment.
- Built a hybrid semantic-search pipeline with the Gemini API and MongoDB Vector Search, improving match precision by **30%**.
- Developed an LLM-powered listing assistant that reduced task abandonment by **20%**, and optimized $geoNear routing to reduce discovery latency by **40%**.

Station Hub – Multi-Tenant EV & Automotive Service Management Platform

FastAPI · Python · Firestore · React.js · Tailwind CSS · Pydantic · Zod · Erdantic

- Built multi-role **REST APIs** with FastAPI and Firestore, and defined strict data contracts with Pydantic and Zod.
- **Documented the system** by generating database ERDs with erdantic, streamlining backend iteration.

AI Real-Time Chat Application (PWA)

Node.js · Express.js · React.js · WebSockets · Supabase · Firebase · OAuth · Docker · OpenAI API

- Built a real-time chat app with **React.js, Node.js, Express.js, and WebSockets**, with persistent, offline-capable sessions and Firebase authentication (Google and GitHub OAuth).
- Integrated the **OpenAI API**, containerized with **Docker**, and used Supabase for session data.

Part Plumbing – Headless E-Commerce Platform

Next.js 15 · React 19 · Headless WordPress · WooCommerce · GraphQL · Gemini · Pinecone · Groq

- Architected a headless eCommerce platform (Next.js 15 / React 19 with WooCommerce via **GraphQL**) and a **RAG support pipeline** that increased automated inquiry resolution by **30%**.

ProfileIQ – TikTok Social Media Analytics SaaS

Next.js · TypeScript · Redux Toolkit · Microservices · Decoupled Auth · Vercel · CI/CD

- Built a type-safe **Next.js/TypeScript** frontend with **Redux Toolkit**, backed by microservices with decoupled authentication and automated **CI/CD** on Vercel.

CERTIFICATIONS

· Google Project Management Professional Certificate (Coursera)
· Google IT Support Professional Certificate (Coursera)
· SEO Certification (DigiSkills)
· HCCDA – AI, Corvit Rawalpindi (In Progress)
· IBM DevOps & Software Engineering Specialization (In Progress)