

HAMZA ALI

Senior Software Engineer | AI Systems & Backend Architecture | Tech Lead

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EXPERIENCE SUMMARY

Senior Software Engineer and Tech Lead with 6+ years of experience designing and delivering scalable backend systems, full-stack applications, and AI-powered platforms for global clients.

Specialized in AI systems, RAG architectures, and agent-based workflows, with hands-on experience in LangChain, LangGraph, OpenAI APIs, Pinecone, LangSmith, and Langfuse.

Recently contributed to Jaspi (AI Recruitment Platform by Powermatch.dk), building memory systems, retrieval pipelines, live interview workflows, and agent orchestration for production AI products.

Strong background in microservices architecture, high-performance backend design, and performance optimization using Node.js (NestJS) and ASP.NET Core. Experienced in leading cross-functional teams and taking products from concept to deployment.

TOOLS & TECHNOLOGIES

Category	Technologies
Languages & Runtimes	TypeScript, JavaScript, Node.js, C#, ES6
Backend & Frontend Frameworks	NestJS, ExpressJS, Next.js, React.js, Angular, ASP.NET Core, React Native, Socket.IO
AI & Intelligent Systems	OpenAI APIs, function calling, LangChain, LangGraph, LangSmith, Langfuse, RAG pipelines, agent orchestration, Pinecone
Cloud, DevOps & Architecture	AWS (EC2, RDS, S3, SNS, Lightsail), Docker, Kubernetes, DigitalOcean, Heroku, Nginx, microservices
Databases & Caching	PostgreSQL, MySQL, MongoDB, Redis, RealmDB, Firestore, CouchDB

PROFESSIONAL EXPERIENCE

Senior Software Engineer | CompuTech Pvt. Ltd.

Lahore, Pakistan | Feb 2023 - Present

- Led backend development for major projects using Node.js, NestJS, and ASP.NET Core.
- Improved response time by 30% by migrating legacy PHP systems to modern Node.js services.
- Reduced infrastructure cost by optimizing SQL queries, enabling a move from AWS RDS 8xLarge to 2xLarge.
- Boosted system efficiency by 20% through Redis caching and backend tuning.

Lead Developer | ODOO-AI

Lahore, Pakistan | Feb 2022 - Oct 2022

- Managed cross-functional teams across backend and mobile development while mentoring new developers in the MERN stack and React Native.
- Collaborated with the CEO on milestones, delivery priorities, and strategic resource allocation.

Software Engineer | Think Solutionz

Karachi, Pakistan | Feb 2018 - Jan 2022

- Directed full-stack development for high-impact client projects across North America, Europe, and the Middle East.
- Architected scalable and secure backends using Node.js for web and mobile applications.

- Managed full project lifecycles and integrated client feedback to enhance product quality.

PROJECTS

Jaspi - AI Recruitment Platform (Powermatch.dk)

Technologies: NestJS microservices, TypeScript, Next.js, LangChain, LangGraph, LangSmith, Langfuse, Pinecone, PostgreSQL

- Built memory generation to preserve context across AI interview sessions.
- Developed RAG pipelines for company policies and knowledge-base retrieval.
- Implemented AI live interview workflows with real-time interaction and agent orchestration.
- Integrated prompt management, tracing, and evaluation with LangSmith and Langfuse.

General Admin - AI-enabled Low-Code Platform

Technologies: NestJS, Angular, Node.js, MongoDB, Redis, Docker, Kubernetes, OpenAI, LangChain

- Integrated AI-enabled workflow automation and app-builder modules.
- Built user authentication and modular platform capabilities.
- Helped launch beta at LEAP 2024 and secure VC interest.

BMW Group KSA - Logistics Hub Portal for Naghi Motors Group

Technologies: NestJS, Kafka, Next.js, MySQL

- Led backend development and integration for the logistics hub portal.
- Built asynchronous integration with fleet management and delivery systems.

eduPortal.pk - Educational Management System

Technologies: Node.js, React.js, MySQL, Redis, Socket.IO

- Supported 300,000+ active users with 3-4 second average response time after PHP-to-Node.js migration.

vmeals.ae - Healthy Food Platform

Technologies: Next.js, Node.js, Payload CMS, MongoDB

- Developed SEO-optimized web applications handling 200K+ monthly visitors.

Techfinder - On-Demand Mechanic Service

Technologies: React.js, React Native, Node.js, MongoDB, Socket.IO

- Served as system architect and lead developer for a team of 5.
- Implemented real-time tracking and order synchronization.

EDUCATION

Bachelor of Science in Computer Science

Sindh Madressatul Islam University | 2016 - 2020