

Tayyab Faisal

Karachi, Pakistan

Full Stack Engineer — AI Systems Developer

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Technical Skills

Backend & Systems

Node.js, TypeScript, Express.js, Fastify, FastApi
Distributed Systems, Event-Driven Architecture
Queue Systems (RabbitMQ), Background Processing, Async Workflows

AI / ML & Agents

LLM Integration (OpenAI APIs)
AI Workflow Design & Automation
Prompt Engineering & Response Optimization
Structured Data Processing, Context Handling

Frontend

React.js, Next.js
Component Architecture, State Management
Real-time UI (WebSockets)

Databases & Infra

PostgreSQL, MongoDB, Redis
Docker, CI/CD Pipelines (GitHub Actions)
Multi-Tenant Architecture, NGINX

Experience

360XpertSolutions – Associate Backend Developer

on-site | Karachi

- Built mobile app APIs using Node.js/Fastify with faster response times
- Implemented Socket.io for real-time chat and notifications
- Designed PostgreSQL schemas with Sequelize (40% query improvement)
- Added JWT authentication and Redis caching
- Optimized APIs handling 5,000+ concurrent users.
- Implemented asynchronous workflows and background jobs with RabbitMQ.

Freelancing – remote | Karachi

- Built EDELROK, a ClickUp-style project management app with task management, custom workflows, and responsive UI — delivered solo end-to-end.
- Independently designed and shipped a Smart Parking System using YOLOv10, OpenCV, and PaddleOCR for real-time vehicle plate detection — covering full stack, backend, and ML pipeline.

Project Experience

Digital Call Reporting (CRM System)

Role: Full Stack Developer

- Designed an offline-first sync architecture supporting delta synchronization, conflict handling, and reliable data updates between mobile clients and the backend.

- Integrated push notification infrastructure using Firebase Cloud Messaging (FCM) to deliver real-time reminders, task updates, and alerts to field representatives
- Built CRM for tracking sales representatives and activities
- Developed dashboards for performance monitoring

Conclavity App

Role: Full Stack Developer

- Architected a high-concurrency real-time messaging engine utilizing Socket.io and RabbitMQ, integrating asynchronous AI-driven processing pipelines to deliver scalable and intelligent chat features.
- Implemented a robust end-to-end encryption (E2EE) layer leveraging X25519 ECDH and AES-256-GCM to ensure top-tier data confidentiality and integrity for both 1-on-1 and group conversations.
- Integrated Firebase Cloud Messaging (FCM) with secure, encrypted payloads to provide reliable cross-platform push notifications and optimize real-time user engagement.

XpertAssistant — AI-Powered Recruitment Platform

Role: Full Stack + AI Systems Developer

- Designed AI-driven candidate ranking system using structured CV data
- Built LLM-based workflows for automated evaluation and summarization
- Developed scalable backend APIs for large candidate datasets
- Implemented asynchronous pipelines to reduce evaluation time
- Built recruiter dashboards for filtering and shortlisting

Smart Housing Society — AI + Computer Vision

Role: Backend + AI Systems Engineer

- Developed a computer vision-based security system using face detection and ANPR (YOLO + PaddleOCR) for automated resident verification and vehicle entry management
- Built an AI-powered society assistant using Agentic AI and RAG, allowing residents to query rules and notices through an intelligent chatbot with document knowledge bases
- Engineered real-time event processing for attendance monitoring, visitor tracking, and automated alerts.

SochAI — Community x AI App

Role: Backend Developer

- Engineered real-time chat with Socket.IO, chat history, and word-by-word AI streaming responses.
- Designed full-featured post APIs enabling likes, comments, shares, user tagging, and threaded discussions similar to modern social platforms.
- Integrated RabbitMQ for reliable microservice communication and decoupled background task processing.

AI Knowledge Assistant

Role: Full Stack Engineer

- Built a multi-tenant document intelligence pipeline for PDF/DOCX/CSV ingestion with text extraction, semantic chunking, and embedding-based retrieval
- Developed backend with FastAPI, PostgreSQL, and Redis, adding JWT-based multi-tenant security, similarity threshold guardrails (anti-hallucination), and confidence scoring
- Designed event-driven architecture for handling concurrent user interactions.

Education
