

MUHAMMAD TALHA

Senior Software Engineer | Full-Stack Developer | Backend & Mobile

Lahore, Pakistan | +92 335 4186351 | Talhach.dev@gmail.com

[linkedin.com/in/talha6717](https://www.linkedin.com/in/talha6717) | github.com/mtalha6717 | talhariaz.com

PROFESSIONAL SUMMARY

Senior Software Engineer with 6+ years of experience designing, building, and deploying full-stack web and mobile applications. Specialised in backend architecture with Ruby on Rails, Node.js, NestJS, and Django, paired with React.js and Next.js on the frontend. Experienced team lead who has managed multi-project delivery, code review, and mentoring while remaining a hands-on individual contributor. Track record of integrating complex third-party systems including Stripe, SSO/SLO, TransUnion, OpenAI, and blockchain/Web3 services, and of delivering scalable REST and GraphQL APIs, PostgreSQL data models, CI/CD pipelines, and automated test coverage. Strong written and verbal communication with direct client ownership in Agile/Scrum environments.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Ruby, Python, SQL, HTML5, CSS3

Backend: Ruby on Rails, Node.js, Express, NestJS, Django, REST APIs, GraphQL, WebSockets, Socket.IO, JWT authentication, Bull / Sidekiq background jobs, cron scheduling

Frontend: React 19, Next.js 15 (SSR/SSG), React Router v7, React Native (Expo), Redux, Zustand, TanStack Query, React Hook Form, Yup / Zod, Tailwind CSS, responsive design, i18n / RTL

Databases: PostgreSQL, MySQL, MongoDB, Redis (cache, sessions & pub/sub), Elasticsearch, Supabase, TypeORM, ActiveRecord, schema design & query optimisation

Cloud & DevOps: AWS (EC2, ECS Fargate, Lambda@Edge, CloudFront, S3, SES), SST / Infrastructure-as-Code, Docker, Docker Compose, CI/CD pipelines, Git, Linux, TypeScript monorepos (Yarn workspaces), Sentry, CloudWatch

Testing & Practice: TDD, unit & integration testing, Vitest, Playwright, ESLint / Prettier, Husky pre-commit hooks, code review, Agile / Scrum, technical documentation

Integrations & AI: Stripe & Stripe Connect (escrow), SSO / SLO, TransUnion, Google Gemini, OpenAI / ChatGPT APIs, Google ML Kit, Zoom, Google Workspace APIs, DataForSEO, Google My Business, Cloudflare Turnstile, Web3 wallets & on-chain contract calls

Tools: Jira, Trello, Asana, Figma, Postman

PROFESSIONAL EXPERIENCE

Independent Contractor — Senior Full-Stack Engineer | Remote (international clients) | 2025 – Present

- Deliver end-to-end backend, mobile, and Web3 features for clients across healthcare, marketplace, and food-intelligence products, owning scope, architecture, and delivery.
- Architected a backend platform for a health and nutrition intelligence product, covering condition-based routing logic, a Supabase-backed knowledge service, and a governed reasoning layer, structured as milestone deliverables demonstrated end-to-end in staging.
- Built React Native (Expo) mobile applications including a guided clinical photo capture flow with AI-driven validation, real-time Socket.IO messaging, and Stripe payment processing.
- Developed multi-tenant Next.js applications with authentication, role-based CRUD, internationalisation, and light/dark theming.
- Automated PostgreSQL backup and disaster recovery on AWS EC2, dumping multiple databases to cloud storage via service-account authentication, and documented the process in an operational runbook.
- Run weekly delivery plans and daily client status reporting; review and merge team pull requests to maintain code quality.

Team Lead & Senior Software Engineer | Cybros.dev | 2022 – 2025

- Led a team of developers across 4 concurrent projects, from requirements and planning through to production deployment.
- Provided technical guidance, conducted code reviews, and enforced coding standards and best practices across the codebase.

- Acted as an individual contributor, developing and optimising features across multiple products in parallel.
- Collaborated with stakeholders to define requirements and translate them into scalable technical solutions.
- Implemented Agile methodologies, driving sprint planning and consistent on-time project delivery.

Software Engineer | Opsjet | 2021 – 2022

- Developed a user writing analysis platform using Django and Natural Language Processing to evaluate and improve text-based user input.
- Built and maintained a car rental platform for the Oman market using NestJS, implementing backend services for booking and vehicle management.
- Designed and optimised RESTful APIs for high performance and scalability.
- Integrated machine learning models for text processing and analysis.
- Partnered with UI/UX teams to improve application usability.

Software Engineer | Test.Inc | 2020 – 2021

- Developed and maintained web applications using Next.js, React, and Tailwind CSS.
- Collaborated with cross-functional teams to design, build, and deploy scalable software solutions.
- Optimised application performance and improved code efficiency through disciplined coding practices.
- Implemented RESTful APIs and integrated third-party services to extend product functionality.
- Worked within Agile methodologies to support efficient project management and timely delivery.

KEY PROJECTS

BeautyMedApp — Full-Stack Medical Aesthetics Platform

TypeScript | React Native (Expo) | Next.js 15 | Node.js / Express | PostgreSQL (TypeORM) | Redis | Socket.IO | Stripe | Google Gemini AI

A production-grade, three-tier medical aesthetics marketplace connecting patients with clinics, supporting 91+ treatments across 14 medical specialties with AI-driven photo validation, real-time chat, and a multi-tier commission system.

- Architected a three-service platform (React Native/Expo app, Next.js 15 admin dashboard, Node.js/Express API) with shared JWT authentication over a 58-entity PostgreSQL model and a service-oriented backend of 45+ services, across a ~3,000-file TypeScript codebase.
- Built a dynamic medical questionnaire engine with conditional branching, screening-to-module triggering, repeatable field groups, and immutable submission snapshots, scaling to 91+ treatment questionnaires across 14 specialties with no schema change per treatment.
- Integrated Google Gemini AI into an asynchronous photo-validation pipeline (Bull + Redis) verifying angle, lighting, and pose, returning confidence-scored feedback in 5 languages with idempotency safeguards.
- Delivered horizontally scalable real-time messaging with Socket.IO over a Redis pub/sub adapter (JWT socket auth, multi-device presence, per-socket rate limiting), plus a multi-phase sealed/open bidding and quotation system with cron-driven bid expiry and quote forwarding.
- Implemented a multi-tier role-based commission system (recruiter to manager to area manager) with lead routing, payment-status workflows, and audit trails, alongside Stripe deposit processing and full internationalisation across 5 languages including Arabic RTL.

Pharma8 (PharmasMarket.com) — Two-Sided Pharmaceutical Talent Marketplace

TypeScript | React 19 | React Router v7 (SSR) | Node.js / Express | MongoDB | Redis | WebSockets | Stripe Connect | AWS (EC2 Fargate, Lambda@Edge, CloudFront, S3, SES) | SST | Playwright | Vitest

A full-stack marketplace connecting pharmaceutical companies with specialised talent, covering the entire hiring lifecycle — job posting, matching, interviews, offers, contracts, and escrow-based payments — built as a TypeScript monorepo and deployed serverlessly on AWS.

- Engineered a two-sided marketplace serving talent, company, and admin users across three SSR web apps (React 19 + React Router v7) and a shared Express REST and WebSocket API, organised in a TypeScript monorepo for maximum code reuse.
- Built a secure escrow-based payment system on Stripe Connect, handling milestone and hourly billing, shortfall invoices, payouts, and overage handling to enable trusted transactions between companies and talent.

- Shipped the complete hiring lifecycle end to end: job postings, candidate matching, interview scheduling with Zoom integration, offers, and digital contracts.
- Implemented real-time messaging and live notifications over WebSockets with Redis-backed distributed sessions, enabling horizontally scalable, stateless API containers.
- Deployed the platform to AWS with SST (Infrastructure-as-Code) across dev, UAT, and production environments, using auto-scaled ECS Fargate for the API and Lambda@Edge with CloudFront for global SSR delivery, plus S3 and SES.
- Integrated AI and third-party services (Google Gemini, Hunter.io email verification, Apify scraping, Cloudflare Turnstile bot protection) to automate candidate sourcing, and enforced role-based access control, session auth (bcrypt + Redis), and Zod validation at all API boundaries with Sentry and CloudWatch monitoring.

Ajarlee — Multi-Tenant Rental Marketplace | Next.js, Node.js, PostgreSQL

- Developed the tenant-facing Next.js application including authentication screens, fraud-user CRUD management, internationalisation, responsive layouts, and light/dark themes.
- Built marketplace and search backend capabilities including featured company placement, VAT calculation, and a configurable sorting engine.
- Integrated frontend and backend APIs and reviewed team pull requests to maintain delivery quality.

D3 — Microservices Backend Platform | Node.js, NestJS, GraphQL, TypeORM, Docker

- Led design and architecture of a Yarn workspaces monorepo, enabling efficient management and integration of multiple microservices.
- Developed core features across the api, database, and worker packages using NestJS and TypeORM.
- Owned database schema design and migrations, ensuring data integrity and query performance.
- Implemented CI/CD pipelines with Docker and Docker Compose, and established unit and integration testing frameworks.
- Mentored junior developers and authored technical documentation and coding standards.

Gocamp | Ruby on Rails, Next.js, PostgreSQL

- Built a full-stack application with a Ruby on Rails backend and Next.js frontend connected by RESTful APIs.
- Implemented authentication, authorisation, and role-based permissions for secure user access.
- Optimised PostgreSQL queries and schema design, and used SSR and SSG for improved SEO and load times.
- Integrated payment processing and notification services, and delivered real-time updates via WebSockets.
- Wrote unit and integration tests and deployed via CI/CD pipelines to cloud infrastructure.

Gradingly — AI-Based Grading Platform | Django, Python, NLP, React.js

- Developed Django applications integrating OpenAI/ChatGPT APIs, Stripe payments, and workflow automation.
- Built an AI-driven grading engine alongside a real-time quiz system using sockets.
- Embedded React applications inside Django templates to modernise the user experience.
- Improved workflow security, efficiency, and usability through strategic automation.

GetJess — SEO & Marketing Analytics Platform | Ruby on Rails, PostgreSQL

- Developed and maintained a DIY SEO and marketing software platform for small businesses.
- Integrated the DataForSEO API to fetch and analyse keyword rankings, search volume, and competitor insights.
- Implemented Google My Business post scheduling with automated content updates and background job processing.
- Built analytics dashboards aggregating multiple data sources, and optimised database queries and API requests to reduce response times and server load.

EDUCATION

Bachelor of Science in Computer Science | University of Gujrat | 2016 – 2020

LANGUAGES

English (professional working proficiency) | Urdu (native) | Punjabi (native)