

Kapil Chohan PSM®

Full-Stack Developer & Product Owner · Web · Mobile Apps · AI

+44 7424 614416 · kapilsingh.chauhan@gmail.com · UK ILR Holder · Nottingham, NG11 9JG

[LinkedIn](#) kapilailabs.com

PROFESSIONAL SUMMARY

Senior Full-Stack Developer & Product Owner with a 20+ year IT career spanning web and mobile app development, technical consulting, and solution architecture across enterprise and startup environments — combining deep backend and cloud expertise with hands-on LLM integration using the OpenAI and Claude SDKs. Designs and ships production-grade, AI-enabled eCommerce platforms end to end: responsive web front ends, custom API layers, and native iOS and Android apps published on the Apple App Store and Google Play. Brings both strong technical engineering and creative product, UI/UX and visual design skills — owning the full product lifecycle from concept and design through architecture, build and launch.

Prior to this, 10+ years at Experian UK as a Technical Implementation Consultant, delivering enterprise SaaS on AWS, Azure, and client-server architectures — owning data migration pipelines, API integrations, multi environment release management, and production incident resolution for major UK financial services clients. Comfortable operating as a self-starter across the full stack in lean, fast-moving teams.

TECHNICAL SKILLS

Frontend	React · Next.js · TypeScript · JavaScript (ES6+) · HTML5 · CSS3 · Bootstrap · PWA · Responsive Design
Mobile / App Dev	Kotlin · Jetpack Compose · Swift · SwiftUI · WebView (WKWebView / Android) · Firebase Cloud Messaging · Xcode · Android Studio · Codemagic CI/CD · App Store & Google Play
Design Systems & UI	Material UI · Bootstrap · Component Libraries · Design Tokens · Accessibility (WCAG / ARIA / Semantic HTML) · Mobile-first Design · Responsive UI · UI/UX Principles
CMS & eCommerce	WordPress · WooCommerce · Elementor · Hub Spot · Plugin configuration · Theme development · WooCommerce REST API
Backend & APIs	Node.js · Python (FastAPI) · PHP (OOP) · .NET · C# · REST APIs · Microservices · JSON · Webhooks · SOAP · Postman · Swagger
Databases	SQL Server · MySQL · PostgreSQL · Supabase · Redis · Oracle · Prisma ORM · SSIS (ETL)
Auth & Security	OAuth flows · Token-based auth · Session management · API key security · Entra ID · Supabase Auth · Google OAuth
Cloud & DevOps	AWS · Microsoft Azure · DigitalOcean · Linux (Ubuntu) · Git · GitHub · CI/CD (GitHub Actions / Vercel) · Docker · Docker Compose · Nginx · Shell scripting · Environment management
Observability & Quality	Dynatrace · Monitoring · Incident Analysis · API Testing · Unit Testing · Integration Testing · Jest · React Testing Library · Code Reviews · Pull Request Discipline · Performance Optimisation
AI & Tools	OpenAI SDK · Claude (Anthropic) · Function-calling agents · Recommendation Systems · Real-time Decisioning · Cursor · GitHub Copilot · Prompt Engineering · Structured Outputs · Context Management · Evidence-grounded AI
Methodology	Agile / Scrum (PSM I Certified) · ITIL · Code review · Cross-functional collaboration

PROFESSIONAL EXPERIENCE

Product owner & Lead Full-Stack Developer

NottsIT Ltd

Jun 2025 – Feb 2026

MangoraMart – Live AI-powered Indian & Asian grocery eCommerce platform, UK — app live on both stores:



- Conceptualised, architected, and built MangoraMart from scratch, owning the full product vision, technical architecture, and end-to-end delivery. Every decision, from platform choice to AI feature selection, was made and executed independently.
- Architected a headless platform with two front ends, a WordPress / WooCommerce / Elementor site (Hostinger) for desktop and a separate Next.js / React mobile PWA; bridged by a custom PHP API layer that serves live WooCommerce data (catalogue, cart, orders) to the React app in real time, with automatic device-based redirect to the mobile experience.
- Integrated Stripe for payments across both platforms, with webhook-based event handling and secure server-side transaction processing throughout.
- Integrated the OpenAI SDK to add a multilingual AI assistant (GPT-4o-mini) delivering personalised product recommendations, voice search (Whisper), and an AI shopping list feature with photo-to-list scanning (GPT-4o vision), all live in the mobile PWA with structured JSON parsing and error fallbacks.
- Kept Core Web Vitals healthy and applied accessibility best practice (semantic HTML, ARIA, keyboard navigation) across both platforms (lazy loading, async data fetching, image optimisation), and ran CI/CD via GitHub Actions with separate staging and production environments.
- Built and shipped native iOS and Android apps that wrap the m.mangoramart.com PWA in a WebView shell - Swift / SwiftUI (WKWebView) on iOS and Kotlin / Jetpack Compose (Android WebView) on Android - published live to the Apple App Store and Google Play from a single web codebase, with Firebase Cloud Messaging push notifications and Codemagic CI/CD for iOS builds.

TradeAIAlgo — tradeaialgo.com (UAT/ Pre Production) | Feb 2026 – Present

AI-powered no-code options trading platform for Indian markets (NIFTY, BANKNIFTY) — visual strategy builder, Black-Scholes back testing, live broker order execution, and a conversational AI trading agent.

- Architected a two-tier cloud system: a Next.js 16 (App Router, TypeScript, Tailwind v4) frontend on Vercel, and a Dockerised backend; Node.js API, Python Fast API engine, PostgreSQL 16 and Redis 7 behind Nginx/SSL - on a DigitalOcean droplet, with GitHub Actions CI/CD (type-check gate, SSH deploy, health-checked container rebuild).
- Built the Node.js API (Express, Socket.IO, Prisma ORM, Zod validation) with BullMQ/Redis job queues for back tests and an AES-256 vault for broker credentials; exposing strategies, backtests, deployments and a live market-data proxy.
- Engineered a Python (Fast API) trading engine: event-driven back testing with synthetic Black-Scholes option pricing, plus a real-time decision engine — a live executor that resolves NFO contracts from the exchange instrument master, evaluates live market data and places real

orders via Angel One Smart API (TOTP 2FA), monitors P&L, and auto-squares-off intraday positions.

- Implemented the quant layer; Black-Scholes pricing and an implied-volatility solver (bisection), at-expiry payoff modelling with break evens and probability-of-profit, max-pain and OI/PCR analytics, and hedge-aware SPAN margin.
- Developed TradeAI Intelligence, an LLM-based recommendation agent (OpenAI function-calling with Claude fallback) that autonomously calls live market tools (option chain, OI/PCR, price history), explains positioning in plain language, and recommends structured strategy specs that deploy to the builder in one click.
- Delivered a visual no-code strategy builder - 29 option templates, live premiums, SVG payoff charts and SPAN-margin checks - with Clerk authentication and TanStack Query data fetching.

Orbit AI OS - orbitaios.com | 2026 - Present

Governed multi-agent AI operating system for creating department-specific AI agents, connecting read-only business evidence and producing evidence-linked dashboards for human review.

- Architected and delivered the production platform in Next.js 16, React, TypeScript, Supabase/PostgreSQL and Vercel, covering authentication, tenant-scoped Company workspaces, reusable agent conversations and responsive desktop/mobile experiences.
- Built read-only WooCommerce, Stripe and Google Analytics 4 integrations with OAuth, automated pagination and synchronisation, normalising source data into attributable Company evidence without transactional authority.
- Integrated OpenAI and Anthropic models behind governed department agents, using compact evidence summaries, structured outputs, evidence-ID validation and deterministic fallbacks to reduce context, token usage and hallucination risk.
- Created a premium visual and interaction system using cinematic glass-office environments, responsive desktop/mobile layouts, accessible motion and agent-led conversational workflows, replacing conventional SaaS wizards with an embodied AI-company experience.
- Led delivery through structured sprint increments, with scoped database migrations, acceptance testing and production releases that progressively introduced authentication, data connections, agent orchestration and governed dashboards while preserving established visual and functional baselines.

Database Migration Consultant

Albion Tech Ltd (Contract)
Present

Jul 2026 –

MySQL 5.7 → 8.0/8.4 migration – production SaaS database, DigitalOcean Managed, working directly with the client throughout:

- Designed and delivered the migration strategy — Rackspace MySQL 5.7 to DigitalOcean Managed MySQL 8.0, plus evaluation and validation of an 8.4 upgrade; production never modified.
- Ran upgrade-compatibility assessment and remediation: utf8mb4 conversion, zero-date/sql_mode handling, reserved-word conflicts, and primary-key/foreign-key changes.
- Engineered a staging-relay workaround for the managed platform's disabled local_infile bulk loader.
- Built reusable data-integrity verification tooling (row-count, checksum, and per-user footprint comparison scripts).
- Conducted a schema-improvement study and produced comprehensive technical documentation — dry-run reports, schema references, and a prioritised improvement roadmap.

Kapil AI Labs — kapilailabs.com | 2026 – Present

A portfolio conceived on a single principle: **prove technical depth through design, not diagrams**. I art-directed and engineered kapilailabs.com as a real-time, 3D-animated experience — authoring custom **GLSL/WebGL** shaders for an interactive water hero and choreographing **scroll-controlled animation** that unfolds the narrative as you move down the page. Each product is presented as its own **technical-architecture visualization** — an animated constellation mapping the real stack, services and data flow — so engineering rigor reads as an editorial visual language rather than a spec sheet. Built on Next.js, React Three Fiber and GLSL with a physics-driven interaction layer, fully responsive and production-deployed. It's both a working portfolio and a reusable template system — the whole point being to show technical capability and creative sensibility as one thing: **beautifully engineered**.

Implementation Consultant | [Experian UK, Nottingham](#) | Nov 2014 – May 2025

Delivered enterprise SaaS implementations for major UK banks on AWS and Azure — handling API integration, data migration, release management, and production incidents.

- Designed and built data migration pipelines using REST and SOAP API integrations, SQL Server, and SSIS ETL - with data validation, transformation logic, and error reporting at every step.
- Managed multi-environment deployments across Azure and AWS (PT/PP, SIT/UAT/Prod) with structured change management through ServiceNow - maintained a 99%+ change success rate throughout.
- Used JavaScript, HTML, and CSS to enhance front-end UIs within SaaS platforms, keeping client-facing interfaces updated and functional across environments.
- Used Postman and Bruno extensively for API testing, debugging, and integration documentation.
- Owned P1/P2 incident resolution - coordinating across teams, managing real-time stakeholder communication, and driving SLA restoration under pressure.

Earlier Career (2000 – 2014) | [Tata Consultancy Services](#) · [Sopra Steria](#)

Solution Architect/Consultant (TCS) and Project Leader (Sopra Steria)- full-stack .NET development, system integration and multi-stream delivery for enterprise clients (Vodafone Netherlands, WHO, Boots, Experian); led cross-functional teams and owned client relationships, documentation and BI reporting.

EDUCATION & CERTIFICATIONS

Professional Scrum Master (PSM I) - [Scrum.org](https://www.scrum.org)

ITIL Foundation
AWS Foundation Training
Salesforce Training

B.Tech Electronics & Communication Engineering - Punjab Technical University, India