R A Z I A

AI-Powered Full Stack Engineer Next.js · Node.js · PostgreSQL/MongoDB · RAG & Function-Calling AI Agents

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PROFESSIONAL SUMMARY

Full-stack engineer who has shipped 7 production SaaS platforms end-to-end — database schema through Next.js/Node.js frontends and AI-integrated backends. Specializes in grounding AI features in live application data: RAG pipelines, function-calling agents, and semantic search across legal, healthcare, inventory, and finance domains. Built security-hardened, role-based multi-tenant systems (RBAC, JWT, rate limiting, CSRF) and marketplace payment flows (Stripe Connect) serving real users. 4x international hackathon competitor building autonomous AI agents with persistent memory (CockroachDB, AWS S3, DataHub MCP).

Full-Stack Development · AI / RAG Systems · Secure Multi-Tenant Architecture · Payments & Real-Time Systems

TECHNICAL SKILLS

Frontend	Next.js 15, React.js, TypeScript, Tailwind CSS, Material UI, Redux Toolkit, React Hook Form, HTML5/CSS3
Backend	Node.js, Express.js, REST API Design, JWT / Google OAuth / NextAuth, RBAC Middleware
Databases	PostgreSQL · Prisma ORM | MongoDB · Mongoose ODM | CockroachDB (distributed SQL)
AI / RAG	Groq (llama-3.3-70b-versatile), AI Chatbots & NLP, Function-Calling Agents, Two-Stage RAG Retrieval, Ollama Embeddings, Smart Recommendations
Security & Testing	Helmet, CSRF Protection, Rate Limiting, Zod Validation, Server-side Sanitization, bcrypt, Vitest + Supertest (CI)
Payments & Real-Time	Stripe / Stripe Connect (Marketplace + Fee Splitting + Webhooks), Socket.io, WebRTC, Jitsi Meet
Cloud & DevOps	AWS S3, Vercel, Railway, GitHub CI/CD, DataHub MCP
Media & Comms	Cloudinary (Media), Nodemailer/Gmail OAuth (Email), Chart.js & Recharts (Analytics)
Tools & Languages	Git, GitHub, VS Code, Postman, npm, ESLint, Prettier, JavaScript (ES6+), TypeScript, Python (Basic)

HACKATHON PARTICIPATION

4 international hackathons (Aug–Sep 2026) building CodeReview Agent — an autonomous AI code-review agent with CockroachDB persistent memory, DataHub schema grounding, and AWS S3 archival: CockroachDB × AWS ($8,750, Aug 2026), DevNetwork API + Cloud + AI ($44,500, Sep 2026), Agentic Cinema / Google Cloud — Gemini Enterprise API + Agent Builder ($75,000, Sep 2026), Build with DataHub — Agent Context Kit ($20,500, Aug 2026).

PROJECTS

INTERNSHIP PROJECT

. Fusion Sports Agency — Cricket Player & Club Management Platform • LIVE

fusionsportsagency.co.uk

Owned the homepage, full admin panel, and player registration API for a live UK cricket agency platform as the sole intern engineer.

- Built the public landing page (hero, scroll animations via Framer Motion/GSAP) wired to live Supabase data
- Built the full admin dashboard: player CRUD with approval workflow, schedule/events, highlights, and live analytics (Recharts + CSV export)
- Designed PostgreSQL schema (players, clubs, events, admins, contact_us) with automated migrations and Supabase Storage uploads
- Built dark/light theme system, Schedule & Events management, and Highlights management with image uploads
- Implemented support messaging system using Supabase Realtime for live updates
- Secured admin auth with scrypt hashing, session-based login, and role-based route guards

Stack: Next.js 15 · TypeScript · Tailwind CSS · Supabase (PostgreSQL + Storage + RLS) · Framer Motion/GSAP · Recharts · REST API · Vercel

PERSONAL PROJECTS

00. CodeReview Agent — AI Code Review with Persistent Memory • LIVE

code-review-blush-six.vercel.app

Autonomous AI agent that reviews GitHub repos, remembers every review, and grounds analysis in real schema instead of guessing.

- Groq Llama 3.3 70B analysis covering OWASP security, performance, maintainability, and tech-debt estimation
- CockroachDB persistent memory layer stores full review history, trending repos, and aggregate analytics
- DataHub MCP integration grounds AI review in actual production schema/lineage, reducing hallucinated suggestions
- ✦ AI Agent writes review-grade tags back to the DataHub catalog for team-wide visibility; reports archived to AWS S3 with pre-signed sharing

Stack: Next.js 15 · TypeScript · CockroachDB · AWS S3 · DataHub MCP · Groq API · Vercel

01. Tafawooq — Online Tutoring Platform • LIVE

Live Demo | GitHub →

Full-stack tutoring marketplace with live video sessions, tutor payouts, and an AI study assistant.

- RBAC across student/tutor/admin roles with protected routes; Google OAuth via NextAuth
- Stripe Connect tutor payouts alongside course/session purchase payments
- Socket.io messaging (history, unread counts, read receipts) and Jitsi Meet live sessions; Cloudinary for profile photos, thumbnails, and document uploads
- ✦ AI Landing Assistant chat widget answers visitor questions on pricing/sign-up; AI Study Assistant answers course Q&A and auto-generates quizzes/summaries from course materials

Stack: Next.js 15 · TypeScript · Node.js · MongoDB Atlas · Stripe/Stripe Connect · Socket.io · Jitsi Meet · Cloudinary · Google OAuth · Groq API

02. LawHelpZone — Legal Services Marketplace • LIVE

Live Demo | GitHub →

Legal marketplace where an AI agent answers case questions by querying live platform data, not generic legal text.

- Multi-role dashboards (Client, Lawyer, Admin) with permission-scoped access; Stripe Connect with automated 80/20 fee split
- Stripe Express KYC for lawyer onboarding, verification, and payout management
- WebRTC video/audio calling with call-history logging; Socket.io live notifications
- Admin dashboard for user management, platform analytics, dispute resolution, and refund processing
- ✦ 7-tool function-calling AI agent combining MongoDB filters + Ollama semantic embeddings; auto-classifies case urgency/complexity, summarizes uploaded legal documents, and gives admins cached platform-health insights

Stack: Next.js · TypeScript · Node.js · MongoDB · Stripe Connect · Socket.io · JWT · Helmet · Ollama Embeddings · Vercel · Railway · Groq (Llama 3.3 70B)

03. CodeBox — AI Codebase Assistant • LIVE

Live Demo | GitHub → Frontend

Upload any codebase and get RAG-grounded Q&A, an AI project analysis, and an AI-generated mock technical interview based on your own code.

- Function/class-boundary-aware code chunking (JSZip) instead of naive line splitting
- ✦ Two-stage RAG: cosine similarity + keyword boost narrows candidates, LLM re-ranks final top-K chunks
- ✦ AI Mock Interview generates 12 project-specific questions across 6 categories with a final weakness report
- Hardened auth: JWT in httpOnly cookies, bcrypt hashing, OTP reset with lockout (delivered via Resend)
- Security middleware on every endpoint: Helmet, express-rate-limit, express-validator

Stack: Next.js · React Query · Tailwind CSS · PostgreSQL · Prisma ORM · JWT · bcrypt · Helmet · Ollama Embeddings · Groq (Llama 3.3 70B) · Resend

04. Inventory & Sales Management — Business SaaS • LIVE

Live Demo | GitHub — Frontend → | GitHub — Backend →

A 6-role RBAC system and a 9-tool AI agent both query the same live PostgreSQL data, so answers and permissions never drift from reality.

- 6-tier RBAC (Sales, Inventory, Purchasing, Warehouse, Finance, Admin) with closed-enum validation against privilege injection
- Real-time stock tracking with configurable low-stock alerts and reorder notifications

- Atomic PostgreSQL transactions for stock + sale record consistency; Recharts revenue/profit dashboards
- ✦ AI Assistant (9-tool function-calling RAG) queries live inventory/sales/customer data in real time
- ✦ Multilingual AI auto-detects and replies in English, Urdu, Roman Urdu, Hindi, or Arabic — no manual selection

Stack: Next.js · TypeScript · Tailwind CSS · PostgreSQL · Prisma · JWT · Zod · Rate Limiting · Recharts · Groq API (Function-Calling RAG)

05. Clinic Appointment Management — Healthcare SaaS • LIVE

Live Demo | GitHub — Frontend → | GitHub — Backend →

Role-scoped AI access — a chatbot that only ever sees the data its user is permitted to see.

- Full appointment lifecycle (book → approve/reject/complete) with time-slot management and pagination, enforced server-side by role, across Admin/Doctor/Receptionist/Patient
- Doctors create prescriptions linked to appointments with downloadable PDF slips
- CSRF, rate limiting, bcrypt, and an automated Vitest + Supertest suite running in CI
- ✦ Role-scoped AI function-calling assistant: patients/doctors query only their own records via live DB calls
- ✦ Tiered AI access — anonymous visitors get aggregate stats, logged-in users get permission-scoped data

Stack: Next.js · TypeScript · Tailwind CSS · PostgreSQL · Prisma · Zod · Vitest · JWT · PDF Export · Groq API

06. Finance Tracker — Personal & Business SaaS • LIVE

Live Demo | GitHub — Frontend → | GitHub — Backend →

An AI advisor that answers from a user's real transaction history — not generic financial tips.

- Debt payoff planner, recurring transactions (auto-created on schedule), auto-save rules, receipt OCR, mock bank-sync import, household expense sharing
- 30-day cashflow forecasting with automated overdraft-risk detection
- IDOR-safe by design: ownership verification on every write, timing-safe bcrypt auth, hashed reset tokens
- ✦ AI Financial Advisor (RAG) grounded in live transactions, budgets, debts, and cashflow, with AI-generated natural-language monthly reports; chat history persists across sessions

Stack: Next.js · TypeScript · Tailwind CSS · PostgreSQL · Prisma · Recharts · Zod · React Hook Form · JWT · CSV Export · Groq (Llama 3.3 70B)

PROFESSIONAL EXPERIENCE

Full Stack Engineer · Kodex Byte **2026 – Present**

- Built and shipped production features on fusionsportsagency.co.uk, a live UK-based cricket sports agency platform
- Owned Homepage (full stack), Admin Panel (full stack), and Player Registration API (backend) end-to-end on the Fusion Sports Agency project
- Currently building the Authentication & Login module (Fastify + Prisma) as Developer 1 in a 9-developer team on CueCloud, a snooker club management system
- Resolved post-demo bugs and raised PRs, coordinating module integration with teammates across the stack
- Gained hands-on experience with Supabase (PostgreSQL + Storage + RLS), Framer Motion/GSAP, Fastify, Prisma ORM, and multi-developer Git workflows (branching, PR review, merge conflict resolution)

Full Stack Engineer · Self-Employed / Freelance **2024 – Present**

- Architected and delivered 7 full-stack applications end-to-end — database schema, API development, frontend UI, and cloud deployment
- Built and maintained 6 live production platforms (Tafawooq, LawHelpZone, CodeBox, Inventory, Clinic, Finance Tracker) with zero-downtime deployment
- Designed RESTful APIs with layered security: JWT, refresh token rotation, Google OAuth 2.0, and role-based authorization middleware
- Integrated Stripe and Stripe Connect for marketplace payment flows — automated 80/20 fee splitting and vendor onboarding
- ✦ Integrated Groq API across all 7 projects — function-calling agents, RAG pipelines, and semantic search grounded in live data
- Developed 3 greenfield SaaS platforms on PostgreSQL + Prisma ORM — relational modeling, atomic transactions, Zod validation, and analytics dashboards
- Built CodeReview Agent for 4 international hackathons — CockroachDB persistent memory, AWS S3 archival, DataHub MCP schema grounding
- **Key Achievements:** 1 full-time role (Kodex Byte) · 7 live production apps · AI integration (RAG + function-calling) across all 7 projects · 4 international hackathons · 2 tech stacks (MERN + PostgreSQL/Prisma) · Stripe marketplace payments · Real-time Socket.io/WebRTC systems

EDUCATION

Bachelor of Computer Science (BSCS) · Virtual University of Pakistan, Lahore **2025 – 2029**

- Core CS curriculum: data structures, algorithms, and software engineering principles
- Self-taught full-stack development alongside university studies, building production applications concurrently
- Applied academic programming concepts directly into real-world projects using modern JavaScript and TypeScript frameworks

AVAILABILITY & OPEN TO

Full Stack Engineer · Frontend Engineer · Backend Engineer

Available immediately · Open to remote, hybrid, or on-site in Lahore, Pakistan