

MOATAZ NOAMAN

Software Engineer

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PROFESSIONAL SUMMARY

Software engineer with 2 years and 8 months of production experience across backend, frontend, mobile and infrastructure. I have worked in Java, Node.js and TypeScript, React and Next.js, Flutter, Python and PHP, with PostgreSQL behind most of what I build, and I deploy and operate what I write: Docker, CI/CD pipelines, Nginx and Linux servers. Primary developer on a regulated healthcare platform for a UK client, main backend developer on a multi-tenant CRM, and sole developer of several systems now running live business operations. Comfortable owning a product end to end and working in distributed agile teams.

PROFESSIONAL EXPERIENCE

Full-Stack Developer, Red Software Development

Remote (UK client) | May 2026 to August 2026

- Primary developer on a regulated care platform: Flutter mobile app, Next.js admin dashboard and a Node.js backend on Google Cloud Functions over Cloud SQL PostgreSQL, hosted in the UK for GDPR compliance. 75 database tables, 272 endpoints, 70 mobile screens.
- Designed the permission system as data rather than code over PostgreSQL row-level security, so roles change without a redeploy, with live session invalidation. Clinical safety rules enforced server-side with an append-only audit trail.
- Stack: Node.js, TypeScript, Next.js, Flutter, PostgreSQL, Firebase, Google Cloud.

Backend Engineer, LibraryInfoSpace (EasyDo CRM)

Remote, India | September 2025 to April 2026

- Main backend developer on a multi-tenant WhatsApp Business CRM, growing an early-stage codebase to 37 PostgreSQL tables and approximately 217 REST endpoints.
- Built the WhatsApp Cloud API integration with HMAC-verified webhooks, a Redis and BullMQ campaign queue with per-message delivery tracking, rate limiting and retries, and a Google Gemini assistant answering from each tenant's own documents with keys encrypted at rest.
- Introduced the company's first automated test suites (83 test files) and continuous integration on GitHub Actions.
- Stack: Express, TypeScript, PostgreSQL, Redis, BullMQ, Socket.IO, React.

Backend Engineer, Al-vora Fleet Management

Remote, Portugal | July 2025 to March 2026

- Built the automated scheduling engine in Java on Quarkus with the Timefold constraint solver, covering availability, check-in windows, skill matching and travel time across more than 200 properties per run, with solving progress streamed to the browser.
- Built a routing service on self-hosted OSRM and the Google Maps API with Redis caching, and a tracking service streaming live GPS positions from Teltonika hardware to dashboards over gRPC and WebSockets.
- Service-to-service communication over gRPC with event-driven messaging on Kafka and Redis Pub/Sub. CI/CD on GitHub Actions with Docker deployments to CentOS behind Nginx.
- Stack: Java, Quarkus, PostgreSQL, Redis, Kafka, gRPC, Docker, OSRM.

Full-Stack Developer, Otomatika

Remote | 2025 (2 months)

- Built an advertising analytics backend integrating the Meta Ads, Google Ads and OpenAI APIs for unified campaign reporting.
- Stack: Node.js, Express, MongoDB.

Teaching Assistant, Zewail University

Cairo, Egypt | February 2024 to June 2024

- Taught Computer Networks and Network Programming, covering TCP/IP fundamentals, socket programming and hands-on laboratory sessions.

SELECTED PROJECTS

Payment Wallet with Stripe and PayPal (github.com/MoatazNoaman2001/payment-wallet)

Java, Spring Boot, PostgreSQL, Flyway, Stripe API, PayPal API, Docker

- Double-entry wallet service with idempotency keys enforced by unique index, ordered locking to prevent deadlocks and an outbox pattern for events. A concurrency test fires 100 parallel withdrawals against insufficient funds: exactly the correct 50 succeed and the ledger reconciles to zero.
- Gateway integration with webhook deduplication, idempotent credits, two-phase payouts and a daily reconciliation job comparing gateway records against the local ledger.

Al-Haj Salim, Accounting and Inventory System (Live)

Next.js, TypeScript, Tailwind CSS, Supabase PostgreSQL, Progressive Web App

- Accounting and inventory system running a distributor's daily operations: 52 PostgreSQL functions so one sale posts to inventory, the customer ledger, the driver account and the bank book atomically, with 79 row-level-security policies and a correction-only model where nothing is edited or deleted.

- Offline-first: works without connectivity through local browser storage and replays writes on reconnection. Entirely Arabic with right-to-left layout.

Orphan Data Observatory, Bilingual Data Platform (Live: goco.orphans.care)

Next.js, React, TypeScript, PostgreSQL, WebAuthn

- Arabic-first platform with a full English version publishing indicators for 166 countries on an interactive map, with source, year and confidence grading per figure, behind a seven-stage review workflow with four roles and an append-only audit log. Approximately 1,400 published figures in production.

Tina Clinic, Multi-Tenant Veterinary SaaS (Live: tinaclinic.com)

Odoo, Python, PostgreSQL, OWL, Progressive Web App, SMS OTP

- Each clinic runs on its own database while pet owners are registered once in a unified central database. Doctors look up patients by phone number or QR code, owners verify by OTP through a PWA or SMS, and verified access grants time-limited permissions with every action written to an audit log.

Itqan, Odoo 18 Analytics Dashboards (Live: al-itqan.odoo.com)

Odoo 18, Python, OWL, JavaScript, Chart.js, PostgreSQL

- Five dashboards covering inventory, car sales, fashion, finance and human resources, built as native components. Stock valued from Odoo's real valuation layers, driving reorder alerts, dead-stock detection and per-branch turnover analysis.

Sprint Skills, PMP Certification Platform (Live: pmp.skill-sprint.com)

Laravel 12, PostgreSQL, Blade

- Examination platform serving more than 500 users with over 200 questions across 12 PMP domains, a scoring engine, session management and an administrative dashboard.

Laikji, Chat Rooms and Streaming Application (Google Play)

Flutter, WebRTC, MediaSoup, GetX, Node.js, WebSockets, Redis

- Multi-room voice chat and streaming application published on Google Play, with its real-time backend built in-house: WebSocket messaging, multi-user authentication, role-based access and room management.

Vitalism, Camera-Based Vital Signs Application (BSc Graduation Project)

Android (Kotlin and Java), C++, OpenCV, NCNN, MediaPipe, JNI

- Measures heart rate, SpO2 and blood pressure from the camera using rPPG signal processing, with real-time deep-learning inference through an NCNN and JNI C++ bridge. Published open source.

TECHNICAL SKILLS

Languages: Java, JavaScript (ES6+), TypeScript, Python, PHP, Dart, Kotlin, SQL, HTML5, CSS3

Backend: Spring Boot 3, Quarkus, Node.js, Express, NestJS, Laravel, Django; REST API design, OpenAPI and Swagger, WebSockets, Server-Sent Events, webhooks with HMAC verification, gRPC

Frontend: React, Next.js (App Router, Server Components, SSR and SSG), Vue 3, Angular, Redux Toolkit, TanStack Query, Tailwind CSS, Material UI, responsive design, i18n and full RTL support

Mobile: Flutter and Dart (BLoC, offline-first sync with Drift and SQLite), native Android in Kotlin and Java, published applications on Google Play and the App Store

Databases: PostgreSQL (transactions, locking, stored procedures, row-level security, indexing), MySQL, MongoDB, Redis, SQLite, Supabase; Hibernate and JPA, Prisma, TypeORM, Mongoose

Messaging and Async: Apache Kafka, Redis Pub/Sub, BullMQ, RabbitMQ-style queue patterns, event-driven architecture, idempotency and retry handling, background job processing

DevOps and Infrastructure: Docker and Docker Compose, Kubernetes, GitHub Actions CI/CD, Nginx, Linux server administration (Ubuntu and CentOS), SSL and DNS configuration, VPS deployment, Google Cloud (Cloud Functions, Cloud SQL), Vercel, Railway, monitoring and incident investigation on live systems

Security: JWT (access and refresh tokens), OAuth 2.0, WebAuthn passkeys, role-based access control, row-level security, AES-GCM encryption at rest, rate limiting, CORS and Helmet

Testing: JUnit 5 and Mockito, Jest, Vitest, React Testing Library, Supertest, MSW, PHPUnit; unit, integration and concurrency testing

ERP and Integrations: Odoo 18 module development (ORM, OWL, QWeb), Stripe and PayPal, WhatsApp Business Cloud API, Google Gemini and OpenAI APIs, Google Maps, SMS OTP providers

Tools and Process: Git, GitHub, JIRA, Confluence, Postman, Agile and Kanban, code review, technical documentation

AI-Assisted Development: Daily use of Claude, GitHub Copilot and Cursor for scaffolding, refactoring and test generation, with architecture, correctness and security remaining my responsibility

EDUCATION AND TRAINING

Open-Source Development Track (9 months), Information Technology Institute (ITI), Assiut, Egypt | October 2024 to July 2025

DevOps Engineering Track (6 months), Digital Egypt Pioneer Program (DEPI) | March 2024 to October 2024

Bachelor of Science in Bioinformatics, Assiut University, Faculty of Computer Science and Information Technology | GPA 3.43 (Very Good) | 2019 to 2023

LANGUAGES

Arabic (native), English (professional working proficiency)