CURRICULUM VITAE · BACKEND ENGINEER APPLICATION · NSAVE

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Backend & data engineer · PostgreSQL / Python / TypeScript · Cairo, Egypt

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I build backend systems where a wrong number costs real money: ledgers, reconciliation pipelines, matching engines, and billing. SQL-first on PostgreSQL, verification gates before anything ships, and an “abstain rather than guess” rule wherever automation touches funds. Independent engineer with clients across North America, Europe and APAC; comfortable owning a subsystem end to end with direct founder communication.

nsave.mhndlabs.com	Built for this application: a live USD→EGP remittance backend. Double-entry ledger, idempotent transfers under concurrent retry, sanctions-screening holds, append-only audit trail, partner reconciliation. PostgreSQL + Next.js, deployed, with a 17-check API test suite.

01 Selected engagements

Matching engine for a collectibles arbitrage platform

US client · PostgreSQL, Supabase, Python

Audited a 50-table production schema (211 migrations, 44 RPCs), delivered the migration plan, then owned the automated matching tier where a wrong match means buying the wrong asset. Materialized-view refresh strategy with per-consumer staleness budgets; abstain-on-ambiguity resolver design.

99.4% precision held · 2,481 automated commits, 0 wrong IDs · 5.0 review: “will hire again”

Commission reconciliation for a financial advisory

Ireland · Python, Excel ingestion

Consolidated monthly commission statements from 7 insurance and investment providers, each with its own format and totalling rules, into one verified ledger append with a human-confirm gate before commit. Delivered as tooling the client operates himself.

7 providers, one ledger · 5.0 review

Multi-source environmental data platform

Canada · Python, SQL, medallion architecture

Unified five regulatory water-quality sources (7.1M rows) into one queryable surface: canonical schema with per-row provenance, censored-statistics module, and a build verifier that caught a silent regression before the client saw it.

7.1M rows unified · 45/45 verification checks · 18 unit tests on stats module

forsah.me, subscription SaaS built and operated solo

Egypt · Next.js, Stripe, PostgreSQL

Full ownership of a bilingual (Arabic/English) stock-prediction subscription product with paying users: billing lifecycle, deploys, monitoring. Hardened Stripe webhooks after finding a retried-event double-apply in production; raw-body signature verification plus idempotent event handling.

Live at forsah.me with paying subscribers · Idempotent billing pipeline

Daleel, bilingual AI sales agent and demand intelligence

Egypt · Next.js 16, Supabase, model routing

Solo-built PropTech MVP: one grounded agent core behind web chat, dashboard and WhatsApp, in Egyptian Arabic and English. RLS-locked Postgres with server-only keys, deterministic sticky A/B routing across frontier models with a kill switch, WhatsApp delivery made double-send-proof with a mark-then-send cursor.

Live: daleel.mhndlabs.com · Hashed lead ids on the public API

02 Stack

DATABASES	PostgreSQL (SQL-first, MVs, advisory locks, RLS), Supabase, schema design and audit
LANGUAGES	Python, TypeScript/Node (Next.js), SQL
RELIABILITY	Idempotency patterns, double-entry ledgers, reconciliation, verification gates, CI
INFRA	Vercel, Docker, systemd self-hosting, GitHub Actions
AI TOOLING	LLM pipelines and agent tooling (Claude); never replaces review

03 Profile

BASE	Cairo, Egypt · remote, GMT+2
LANGUAGES	Arabic (native), English (fluent)
ENGAGEMENT	Independent contractor, full-time capacity
RIGHT TO WORK	Egyptian citizen