

Alalfy Mansour

Cairo, Egypt · alalfymansour@gmail.com · +201021869887 · alalfy.dev · [GitHub](https://github.com) · [LinkedIn](https://www.linkedin.com/in/alalfymansour)

PROFESSIONAL SUMMARY

Backend & Infrastructure Engineer with sole technical ownership of two live production systems — from schema design and API architecture to containerized deployment and server operations on Linux VPS. Proven track record of making and owning full-stack engineering decisions independently — no team, no handoffs.

PROFESSIONAL EXPERIENCE

Software Engineer (Solo Technical Owner) · [Dukana](#)

Cairo, Egypt (Remote) | June 2025 – Present

- Architected and deployed two production Flask/PostgreSQL systems from scratch — a customer-facing e-commerce storefront and an internal ERP-style operations platform — sole engineer across backend, infra, and database layers.
- Designed a 35+ table relational schema spanning orders, replacements, inventory, employees, suppliers, finance, and analytics — with composite indexes, cascade rules, row-level locking, and connection pooling for production workloads.
- Built a granular role-based permissions system with 60+ per-employee permission flags, full audit trails via activity logs, and session tracking across all user actions.
- Implemented event-driven order status history using SQLAlchemy ORM event listeners, ensuring accurate commission calculation and delivery reporting independent of current order state.
- Deploy and maintain containerized Linux VPS infrastructure — Docker Compose, Gunicorn, nginx reverse proxy, automated SSL renewal via Certbot, and GitHub Actions CI/CD pipeline across dev, staging, and production.
- Platform serves ~3,500 new weekly visitors across ~7,500 sessions, processing ~1,000 orders/month with 12,500+ customer records and growing.

PROJECTS

DukanaStore · Full-Stack · Production Live

[Python](#) · [Flask](#) · [SQLAlchemy](#) · [SQLite](#) · [Bootstrap 5](#) · [Docker](#) · [nginx](#)

Built a PWA e-commerce storefront in Arabic with WhatsApp-based checkout, product variant system, and session-based analytics — deployed solo on VPS via Docker and nginx.

DukanaSystem · Full-Stack · Production Internal

[Python](#) · [Flask](#) · [SQLAlchemy](#) · [Flask-Migrate/Alembic](#) · [PostgreSQL](#) · [Docker](#) · [nginx](#)

ERP-style internal platform decoupled from the storefront — granular RBAC, supplier debt tracking, invoice PDF generation, and finance analytics backed by PostgreSQL with Alembic migrations.

Unhook · Android · Open Source

[Kotlin](#) · [Jetpack Compose](#) · [AccessibilityService](#) · [Android SDK](#)

Android accessibility tool that intercepts vertical swipe gestures in short-video feeds via a transparent overlay — no app modifications, fully offline, zero network calls.

TECHNICAL SKILLS

Languages: C++ · Python · Bash · HTML/CSS

Backend: Flask · SQLAlchemy · PostgreSQL · SQLite · Alembic · REST APIs · Webhooks

DevOps & Infra: Docker · Docker Compose · GitHub Actions · nginx · VPS Administration · Certbot/SSL · Linux

Tools: Git/GitHub · Neovim · Tmux · zsh · Dotfiles · Markdown

Spoken Languages: Arabic (Native) · English (Fluent)

CERTIFICATIONS

Network Support and Security — Cisco Networking Academy · Aug 2025 · 120 hours

Huawei Network Communication — Huawei ICT Academy · Aug 2025 · 120 hours

McKinsey Forward Program — McKinsey & Company · Oct 2025 (selective leadership & problem-solving program)

EDUCATION

B.Sc. Computer Science

Future Academy, Egypt | Oct 2022 – 2026

Core coursework: Algorithms & Data Structures, Operating Systems, Software Engineering, AI & Machine Learning, Calculus, Linear Algebra.