Hussam Elnemr

Cairo, Egypt
+201117514870 h.m.elnemr@gmail.com Hussam Elnemr LilHuss26

AI Engineer

Summary

AI Engineer shipping production RAG systems, agentic pipelines, and backend architecture end-to-end. Led technical direction across CRM, legal-tech, and fintech-adjacent products. Independent ownership from system design to deployment.

Relevant Experience

AI Engineer
Jan 2026 - present

6 Sigma Code — *Full-time— Remote*

- Shipped a CRM AI agent — natural language to live Odoo API actions — with a complete backend layer.
- Designed a RAPTOR-style knowledge tree — structure-aware chunking, recursive clustering across 9 levels into abstract topic nodes.
- Engineered a gRPC-served agentic RAG system embedding 77 Kuwaiti laws (7,399 articles) with continuous ingestion.
- Orchestrated a hybrid retrieval pipeline — pre-filtering, BM25+RRF, vector search — for line-and-article-level citations.

Tech Lead
Jul 2026 - Present

Linkoo — *Part-time— Remote*

- Translated business requirements into full product architecture — data models, task breakdown, and technical roadmap.
- Developed a single serverless Supabase backend — TypeScript Edge Functions, unified auth — serving 3 client apps.
- Established back-office ops platform — design queue triage, shipment tracking with audit logs, catalog & inventory management.
- Devised the NFC and QR binding flow, linking physical cards to durable, activation-bound user profiles.

Software Engineer
Jul 2025 - Mar 2026

Axiora — *Part-time— Remote*

- Built a generative dashboard engine, inferring KPIs directly from raw CSV/Excel data with zero manual setup.
- Enabled natural-language interaction across the product, free-text dashboard re-scoping & ad-hoc chat over the dataset.
- Replaced manual data analysis workflows for 12 pilot companies, delivering instant insights from raw CSV and Excel files.
- Owned backend architecture and system design across 2 products — desktop & website — from data modeling to service boundaries.

Backend Developer
Nov 2025

Freelance — *Online*

- Built a CMMS backend for medical-devices — serving 25+ hospitals across 4 cities, tracking devices and spare parts.
- Delivered end-to-end report workflows — periodic maintenance scheduling, and print-ready PDF export.

Technical Skills

- **Programming Languages**: Python, SQL, Java, TypeScript
- **Backend & APIs**: FastAPI, Flask, SQLAlchemy, Pydantic, asyncio, gRPC
- **Databases**: PostgreSQL, MySQL, Neo4j, MongoDB, Redis
- **Data & Streaming**: PySpark, Kafka, InfluxDB
- **Gen AI & LLM**: LangChain, LangGraph
- **DevOps & Cloud**: Docker, Railway, Grafana, Supabase, Vercel, Upstash

Projects

ProofRAG | *LangChain — FAISS* *Github Repo.*
Mar 2026

- Benchmarked 4 RAG combinations across 2 embedding and 2 retrieval strategies.
- Proposition embedding achieved 80–90% pass rate via 4-criteria LLM quality filtering.
- Engineered proof extraction layer linking every answer to exact source segments.

OdinCode | *Claude Code — GitHub Actions* *Github Repo.*
Jul 2026

- Deployed an event-driven pipeline: Gmail push notifications via Pub/Sub, automated GitHub issue creation, autonomous coding agent, opened PR.
- Generates a written plan before coding — scope, target files, implementation approach, and ordered tasks, per issue.
- Constrained the coding agent — capped tool access and turns, idempotent dedup preventing duplicate work on retries.

InterVox | *LangGraph — Flask* *Github Repo.*
May 2026

- Produced a full voice interview pipeline — live STT/TTS, per-answer scoring, and a final report with coaching notes.
- Architected a 5-agent LangGraph system (planner, interviewer, router, evaluator, report) orchestrated by a supervisor.
- Implemented a Flask backend with REST and WebSocket APIs, handling real-time voice turns, PDF extraction, and session state.

EDUCATION

Kafrelsheikh University **Oct 2021 – Jul 2025**
*Faculty of **Artificial Intelligence** (Bachelor of **Artificial Intelligence**).* GPA: **3.2**

LANGUAGE

- **Arabic**: Mother Tongue.
- **English**: Professional Working Proficiency.