

HASAN ABDELHADY

FULL-STACK AI ENGINEER – CAIRO, EGYPT

☎ +20 01023445254 ✉ hasanabdelhady101@gmail.com

🌐 linkedin.com/in/hasan-abdelhady 🏠 github.com/HasanAbdelhady 🌐 hasanabdelhady.me

Summary

Full-Stack AI Engineer with JavaScript and Python Experience. Built end-to-end web apps, integrated AI (HuggingFace, LangChain), and designed responsive UIs using ReactJS and AI-based tools (Replit/Streamlit). Comfortable with Replit for backend prototyping, scalable services in FastAPI/Django, integrating external APIs, and shipping with Git, Docker, and Github Actions.

Skills

Programming Languages: JavaScript, TypeScript, Python, SQL
Frontend/UI: Responsive UI/UX via ReactJS, TailwindCSS
Backend/Frameworks: FastAPI, Django; Flask
AI: GPT/OpenAI, LangChain, LangGraph; prompt writing/testing; agentic workflows
Platforms/Tools: Replit, Lovable, Docker, Git, GitHub Actions, Linux, CI/CD
Data/Vector Stores: Pinecone, ChromaDB, PostgreSQL (pgvector);
Concepts: Full-stack app dev, API design, external API integrations, SSE streaming, RAG
Languages: Arabic (Native), English (Full Professional Proficiency)

Experience

Full-Stack AI Developer — Carbonless Mar 2024– Present

Mansoura, Egypt

- Developing end-to-end features: FastAPI backends, integrations with external APIs, and web UI enhancements.
- Collaborated with design/product; built company website and improved SEO by 70%.
- Dockerized services and set up CI/CD with GitHub Actions; reduced deployment time by 80%.

Python Web Intern — ITI Aug 2024– Sep 2024

Mansoura, Egypt

- Built a full-stack e-commerce simulation (Django/PostgreSQL) and a CLI crowdfunding tool using OOP principles.
- Designed multi-table schemas; practiced debugging, testing, and clean code.

AI Engineering Intern — Baianat Sep 2023– Oct 2023

New Damietta, Egypt

- Applied AI in full-stack contexts; collaborated across engineering and product; attended advanced AI workshops.

Recent Projects

GuideMe – AI Tutor Platform | Team leader / Full-Stack Developer — 🏢

Led a team of 9 engineers; architected end-to-end app (LLMOps + UX). Applied RAG with Hugging Face Sentence-Transformers + PostgreSQL/pgvector; Leveraged the Groq API; built custom agent tools/workflows leveraging LangGraph; real-time chat over SSE.

ChatGPT Clone | OpenAI-compatible LLM system — 🏠

Django backend exposing OpenAI-compatible endpoints (Groq/OpenAI); multi-turn conversation memory with prompt templates; SSE streaming for low-latency chat.

Soilitical – Crop Recommendation System | Agritech — 🌐 🏠

Django REST Framework (DRF) backend with a ReactJS front-end; connected to a SQLite database. Built a predictive model using an XGBoost Classifier, leveraged MLOps and integrated external data sources; deployed the front-end to Netlify/Vercel.

Deep Learning-Enhanced Differential Evolution | Novel algorithm research — 🏠

Implemented the classic Differential Evolution and a Deep Learning-enhanced variant entirely from scratch in PyTorch; achieved 45% convergence improvement.

Denoising Autoencoder for Image Reconstruction | Deep Learning from scratch — 🏠

Implemented two denoising autoencoders (MNIST/CIFAR-10) in PyTorch with Gaussian noise injection, skip connections, and batch normalization; improved reconstruction quality with robust data pipelines.

Education

Mansoura University Oct 2020 – Jul 2025

BSc Degree in Artificial Intelligence Engineering — GPA: 3.45/4.0,

- Thesis: An Intelligent Agent-based AI Tutoring Platform With Personalized Learning and Real-Time Document Analysis
- Relevant Courses: Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, Robotics

Certificates

DataCamp - AI Engineer for Developers Associate 🌐 2025