

Abdalrahman Wael

Software Engineer

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EXPERIENCE

Software Engineer – dKilo

Feb. 2026 – Present

Founding Engineer on [Fuzzbucket](#), an AI creative and marketing platform

- Built a custom **LangGraph agent harness** with shared brand memory, policy-aware tool execution, context compaction, reusable skills, specialist subagents, and background tasks; added steering, cancellation, and persistent run/event tracking.
- Developed full-stack creative workflows across **Next.js**, **React Flow**, and **NestJS**, connecting conversational requests, reusable templates, and existing assets to editable image/video generation graphs.
- Implemented spend authorization, credit holds, idempotent settlement, and request reconciliation to avoid duplicate paid execution; added runtime regression tests, trace-based audits, and SSE recovery across services.

Founder – Okiynai

May 2025 – Dec. 2025

AI-powered commerce platform with storefront-building and merchant-management agents

- Co-built a multi-tenant commerce platform covering catalog, inventory, checkout, payments, subscriptions, orders, authentication, and storefront hosting.
- Built the **Python agent runtime** for Builder and Keeper, including persistent tool context, live-editor feedback, asynchronous execution, streaming, and usage/cost tracking.
- Developed a **React/Vite storefront compiler** with virtual filesystems, file-based routing, server-side rendering, and data loaders; created **RQL**, a typed query runtime for applications and AI agents.

Research Contributor – fast.ai Local Research Group

Jan. 2025 – Mar. 2025

Small-language-model training and evaluation

- Built training, data-processing, and evaluation workflows on Modal for small-language-model fine-tuning experiments; contributed SmolLM2 evaluation configuration and CSV/JSON result exports to **llm-foundry**.

RESEARCH & PROJECTS

Dense vs. Sparse Pretraining at Tiny Scale | *PyTorch*

[Paper](#) | [Code](#)

Published a sole-author arXiv study comparing dense and top-2 MoE Transformers through three-seed experiments with active- and total-parameter matching.

Nafsi – Graduation Project | *Python, FastAPI, PyTorch, Weaviate*

Co-built a bilingual wellness application with **Weaviate-backed RAG** over conversations and journals and local model serving; trained an Arabic-English **BERT** model and experimented with **SmolLM2 LoRA fine-tuning**.

Myntrea – Spatial Notebook Editor | *TypeScript, Next.js, React*

[Website](#)

Co-built a modular rich-text/Markdown/LaTeX editor with spatial cells, IndexedDB persistence, queued PostgreSQL synchronization, sharing, and PDF export.

EDUCATION

Modern Academy for Computer Science and Management Technology

Cairo, Egypt

B.Sc. Computer Science | **GPA: 3.74/4.00**

Oct. 2021 – Jun. 2025

LEADERSHIP

Founder & Technical Lead – **BLEU**

- Built a **3,500-member** Arabic technical community; organized events and learning activities, and delivered talks on software engineering and AI.

TECHNICAL SKILLS

Languages: Python, TypeScript/JavaScript, SQL, C/C++

Full Stack: React, Next.js, NestJS, FastAPI, Express, PostgreSQL, TypeORM, Drizzle ORM

AI/ML: LangGraph, LangChain, LiteLLM, DSPy, PyTorch, RAG, LoRA; RL/post-training fundamentals

Infrastructure: Linux, Docker, Nginx, AWS, Cloudflare, VPS, GitLab CI/CD

Languages spoken: Arabic (native), English (fluent)