Ziad Waleed

+201141398855 | ziadwaleedmohamed2003@gmail.com | linkedin.com/in/ziadwaleed | github.com/ZiadWaleed2003 | Cairo, Egypt

Education

Helwan University — Cairo, Egypt
Bachelor's degree in Computer Science — *2022 – 2026*

Experience

AICE XPERT — Remote
AI / NLP Intern — *2025 – Present*

- Currently contributing to the development of CollabArena, a novel platform for AI agent collaboration and competition.

IEEE-FCAI — Cairo, Egypt
Vice-Director Machine Learning Committee — *Dec 2024 – June 2025*

Projects

Dawrly: Autonomous Multi-Agent System for Job Hunting | *CrewAI, FastAPI, Docker, AWS*

- Engineered an autonomous multi-agent system using crewAI to automate the end-to-end job search process, from query generation to final reporting.
- Developed a four-agent crew: a Job Analyst for query creation, a Searcher using the Tavily API, a Scrutinizer leveraging the FireCrawl API for deep scraping, and a Report Generator.
- Architected a robust backend with FastAPI and integrated multiple LLM providers (Gemini 2.0 Flash, NVIDIA NIM(Qwen3), OpenRouter(DeepSeek-R1)) for enhanced flexibility and performance.
- Containerized the application with Docker for a full-stack deployment with a React frontend on AWS EC2.

Financial RAG System for Stock Market Analysis | *LangChain, ChromaDB, Gemini 1.5, Alpha Vantage API*

- Developed a Retrieval-Augmented Generation (RAG) system using LangChain and ChromaDB for financial data analysis.
- Integrated Alpha Vantage API for stock data and News API for real-time company news.
- Implemented time-series forecasting for stock price prediction (next 10 weeks) using historical data.
- Utilized Gemini 1.5 API as the LLM to power an AI chatbot for financial insights and built a full-stack user interface.

Arabic-to-English Machine Translation | *mBART, LoRA, Hugging Face, Gradio*

- Fine-tuned a many-to-many mBART model using LoRA adapters, boosting SacreBLEU score from 16 to 34.18.
- Deployed the fine-tuned model and an interactive Gradio demo to Hugging Face Hub and Spaces.

Tournament Scheduler using Evolutionary Algorithms | *Python, Matplotlib*

- Implemented a tournament scheduler using Evolutionary Algorithms to solve a complex, multi-constraint scheduling problem.
- Designed a custom fitness function and genetic operators (crossover, mutation) to generate fair and balanced tournament schedules.

Awards

Modifier 8.0 ML Hackathon - 1st Place
Issued by IEEE HSB

- Won 1st place in the Computer Vision Hackathon by developing a CNN model that achieved a 95.8% accuracy score.
- Utilized a pre-trained Xception architecture and fine-tuned it on a limited dataset.
- Applied data augmentation to increase dataset size and enhance model performance.

Technical Skills

Languages: Python, C++ , Java, PHP
AI & ML: CrewAI, LangChain, PyTorch, Scikit-learn, Hugging Face,Transformers , Fine-Tuning LLMs
Tools & Platforms:Git , Docker, REST APIs, AWS, MySQl, ChromaDB
Human Languages: Arabic (Native), English (Fluent)