NADA ABOUBAKR

DATA SCIENTIST | APPLIED AI DEVELOPER

(+974) 50301605

Doha, Qatar

nadabakr8102@gmail.com | linkedin.com/in/nadaaboubakr/

SUMMARY

Data Scientist and Applied AI Engineer with experience developing machine learning systems and deploying LLM-based applications in production. Recognized for building a secure offline AI assistant that improved data autonomy and compliance. Strong foundation in aligning ML solutions with product goals, quickly identifying optimization opportunities, and accelerating technical execution in dynamic environments.

TECHNICAL SKILLS

Programming: Python, R, C++, Java, JavaScript

ML & AI Tools: TensorFlow, FastAPI, Flask, LlamaIndex, FAISS, Ollama, NER, BLIP

Database & Visualization: SQL, SQLite, Oracle, Power BI, MATLAB, PostgreSQL, Data Modeling

DevOps: Docker, Git, AWS, CI/CD Languages: Arabic (Native), English (C1)

WORK EXPERIENCE

Applied AI Engineer Intern | Q-Auto, Qatar

Apr 2025 – Jul 2025

- Developed a financial assistant using Google GenAI, automating loan decision support and chatbot Q&A.
- Designed a secure, offline AI assistant with LLM capabilities, reducing dependency on external APIs by 100%.
- Engineered an AI-powered internal search engine using custom embeddings, improving internal document retrieval.
- Integrated RAG architecture using LlamaIndex, FAISS, and Ollama to deliver high accuracy chatbot responses.
- Implemented a conversation memory database for the AI assistant, evaluating SQLite, MongoDB, and PostgreSQL for scalability and efficiency.

Arabic Data Annotator for LLM Benchmarking (Freelancer) | Appen, Remote

Dec 2024 – May 2025

- Created over 500 complex Arabic questions prompts with 90% semantic quality for multilingual LLM evaluation.
- Curated and ranked Arabic content, contributing to an industry-wide benchmark dataset for model performance.

IBM Data Scientist Trainee | Digital Egypt Pioneers Initiative (DEPI), Egypt

Apr 2024 – Oct 2024

- Completed a 6-month data science program focusing on machine learning and IBM technologies, with training in Python, SQL, model building, data pipelines, and visualization.
- Developed a machine learning model to predict the ten-year risk of coronary heart disease using the Framingham Heart Study dataset, achieving 89% accuracy, with a GUI for simplified user interaction. | <u>GitHub</u>

IT & Telecom (Data Analysis) Intern | Al-Ahli Hospital, Qatar

Aug 2023 – Sep 2025

- Delivered 3 Power BI dashboards that improved strategic decision-making for hospital operations.
- Applied basic ML models to predict demographic health trends, increasing data utilization efficiency.

Machine Learning Intern | Technocolabs Softwares Inc., Remote

Apr 2023 – Jul 2025

- Increased mortgage trend prediction accuracy by 86% using supervised ML and deployed with Flask.
- Engineered a retail sales forecasting model (70% accuracy) by leading feature design and exploratory analysis informing SKU-level inventory decisions.

EDUCATION

Master of Data Analytics in Health Management, Hamad Bin Khalifa University, Qatar 2025 - 2027 Bachelor of Computer and Data Science, Alexandria University, Egypt – CGPA: 3.407/4 2020 - 2024

SELECTED PROJECTS

Drug Combination Safety Predictor

GitHub

- Built a deep learning model with AUPR of 0.915 to forecast drug-drug interactions from gene expression data.
- Constructed 978-dimensional vectors using gene properties, increasing interpretability and clinical value.
- Deployed system on cloud with real-time web interface; used by medical researchers.

Suicidal Post Detection (Arabic NLP)

• Designed an NLP model to flag suicidal ideation in Modern Standard Arabic posts, aiding mental health awareness.

CERTIFICATION

IELTS Academic: Band Score 7.5

Dec 2024

DataCamp Associate Data Analyst in SQL

Oct 2024

ADDITIONAL EXPERIENCE

Wavemakers United – Web Developer Volunteer

• Designed and developed user-friendly websites focused on improving usability and accessibility for clients.

IEEE SSCS Alex SC – Machine Learning & HR Volunteer

- Presented an internal session on data visualization.
- Managed events and led volunteer recruitment and onboarding.