Gehad Helmy Abdelrasik

GehadHelmy/portfolio | github.com/GehadHelmy

Summary

I'm a Data Science and AI student with a strong track record in transforming complex data into meaningful, real-world solutions. I combine deep analytical skills with curiosity and creativity to build intelligent systems that make an impact — not just analyzing data, but exploring it, questioning it, and deploying models that matter. Proficient in Python, SQL, Scikit-learn, and Streamlit, with experience in data engineering, machine learning, and interactive dashboards. Passionate about predictive modeling, smart systems, and solving real-world problems through data-driven innovation.

Education

Alexandria University, Bachelor's in Computer & Data Science

Sept 2023 - May 2027

- **GPA**: 3.56/4.0
- Relevant Coursework: Machine learning, AI, data science, Data mining, databases, probability and statistics

Internships

Data Science & AI Intern — Digital Egypt Pioneers (DEPI)

- Remote / Alexandria, Egypt | July 2025 Present
- Track: Data Science & AI Data Engineering Focus

IoT Intern — Faculty of Computers and Data Science, Alexandria University

• Alexandria, Egypt | June 2025 – Present

Projects

Smart Emotion-Aware Monitoring (LumiVerse) (August 2025 – October 2025)

github/LumiVerse

- Built an AI-powered IoT system that detects and responds to user emotions using Cohere's language models.
- Developed a FastAPI backend with LangChain for emotion classification and empathetic responses.
- Integrated Supabase (RLS, triggers) and HiveMQ MQTT for real-time communication with ESP32 sensors. .
- Created a Flutter app interface and deployed APIs on Railway for scalable, interactive performance.
- Tools Used: Python, FastAPI, LangChain, Cohere API, Supabase, MQTT, HiveMQ, ESP32, Flutter, Railway

Breast Cancer Awareness App (April 2025 - Present)

App/Live Demo

- Developed an AI-powered diagnostic tool using the Breast Cancer Wisconsin dataset, achieving 98% accuracy in tumor classification with Scikit-learn.
- Implemented Recursive Feature Elimination (RFE) to optimize model performance and reduce overfitting.
- Designed and deployed an interactive Streamlit app for real-time predictions, featuring visualizations of key metrics (precision, recall, confusion matrix).
- Tools Used: Python, Scikit-learn, Streamlit, Pandas, Matplotlib

Flights Web Scraping & Analysis (May 2025 - July 2025)

github/Flights-scraping

- Built an end-to-end pipeline to scrape and analyze 100+ flight routes from public aviation APIs, cleaning and transforming raw data using Pandas.
- Created dynamic visualizations (e.g., route maps with Folium, passenger trends with Seaborn) in a Streamlit dashboard, highlighting top departure countries and seasonal trends.
- Insights enabled hypothetical cost-saving strategies for airlines by identifying underutilized routes.
- Tools Used: Python, Pandas, Folium, Matplotlib, Seaborn, Streamlit

Technical Skills

Languages: Python , SQL, R, Java , Dart (Flutter)

Machine Learning: Scikit-learn, CatBoost, KNN, SVM, Neural Networks

Data Analysis & Visualization: : Pandas, NumPy, Matplotlib, Seaborn, Power BI

Tools & Frameworks: Streamlit, Folium, NetworkX, Git

Databases: SQL, MongoDB, Excel, Relational Database Design

Other: Data Structures and Algorithms, OOP, Basic Security Principles

Soft Skills

Analytical Thinking Problem-Solving curiosity creativity Management Team Collaboration

Language

Arabic: Native

English: Professional Working Proficiency (Advanced written & verbal communication)

Volunteering

IT Committee Member — HackerRank FCDS

IT Member — Project Engine FCDS

OC Member — CTRL+A