Ahmed Ayman Al-Hofy

Cairo, Egypt | +201027557259 | ahmedalhofy42@gmail.com
https://github.com/AhmedAyman4 | https://www.linkedin.com/in/ahmed-alhofy/ | View my Portfolio!

Summary

Aspiring Data & Machine learning Scientist with skills in Python, SQL, ML, NLP, and data analysis. Proficient in Pandas, Scikit-learn, Tableau, and Power BI. Information Systems student at the Faculty of Computers & AI, University of Sadat City, Passionate about using data to solve everyday challenges and applying AI to create practical, impactful solutions.

Education

Bachelor's Degree, Faculty of Computers & Artificial Intelligence – University of Sadat City *Graduating June 2026*

CGPA: 3.23, Major: Information Systems.

Skills

- **Technical:** Python (ML/DS), SQL, Bash, HTML/CSS, LLMs, LangChain/Graph, Scikit-learn, TensorFlow.
- **Tools & Skills:** Vector Databases, Stats, Tableau, Power BI, Excel, Docker, Git, OOP, Problem-Solving, Communication.

Experience

AI Engineer | Konecta · Internship *New Cairo, Egypt | Jul 2025 - Present*

- Built/optimized ML models (classification, clustering, image recognition) using scraped and preprocessed Python datasets.
- Developed RAG chatbots featuring document indexing, vector embeddings, and multi-turn query handling.
- Streamlined AI and data operations by building automated end-to-end workflows with n8n.

Data scientist | Digital Egypt Pioneers Initiative - DEPI · Internship *Alexandria, Egypt | Oct 2024 – May 2025*

- Analyzed data and built/deployed ML models using Python, SQL, Scikit-learn, MLflow, and prompt engineering.

Intern | CIB Egypt · Internship *Cairo, Egypt | Jul 2024 - Jul 2024*

- Developed data, financial, and entrepreneurial skills to strengthen problem-solving and decision-making.

Projects

Retail Analytics Copilot (Hybrid RAG + SQL Agent)

- Built a Dockerized Retail Analytics Copilot with RAG+SQL, BM25, DSPy, and Streamlit.
- Developed a LangGraph workflow with NL→SQL and Chain-of-Thought reasoning for accurate retail insights.

Semantic Book Recommender:

- Built a semantic book recommender with vector embeddings, sentiment analysis, and natural language search.
- Created a Gradio web app with zero-shot classification for 7,000+ books, enabling precise, interactive discovery.

Customer Segmentation:

- Clustered wholesale customers with K-Means, Hierarchical, DBSCAN, and MeanShift, using preprocessing, PCA, and evaluation metrics.
- Derived customer profiles from spending patterns to guide targeted marketing and sales strategies.

Data Scraper (Real Estate & E-Commerce):

- Built Python scrapers with Playwright and BeautifulSoup to extract 1,400+ real estate listings.
- Automated scrolling and pagination, producing versioned CSVs and cutting manual work by 90%+.

Automated Document Processing:

- Built an AI extractor with OCR and LangChain, reducing manual document processing by 80%.
- Developed a Streamlit/Flask app with real-time extraction and MongoDB-powered semantic search for interactive querying.

Courses And Certifications

- SAP Certified Associate - SAP Generative AI Developer
- AWS Certified AI Practitioner Issued by Amazon Web Services Training and Certification
- Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate Issued by Oracle
- Data Scientist Associate Issued by Data Camp
- IBM SkillsBuild Data Analytics Certificate
- McKinsey Forward Program - Issued by McKinsey & Company
- AWS Academy Graduate - AWS Academy Machine Learning for Natural Language Processing
- AWS Academy Graduate - AWS Academy Cloud Foundations
- AWS Academy Graduate - AWS Academy Data Engineering
- Applied Data Science with Python - Level 2 Issued By IBM
- Google Data Analytics Professional Certificate Issued by Coursera
- The Machine Learning Process A-Z – Issued By 365 Data Science