## **Ezz Eldin Ahmed**

#### PROFESSIONAL SUMMARY

Senior Statistics student specializing in data-driven research, machine learning, and predictive modeling, with a focus on delivering rigorous, impactful solutions.

#### **EDUCATION**

**Bachelor of Statistics** 10/2022 – present

Faculty of Economics and Political Science - Cairo University

- GPA: 3.715/4.0
- Recipient of Dr. Ali El-Din Hilal Award for Academic Excellence, [2025]

#### **SKILLS**

### **Programming & Data Tools**

Python, R, SQL, Git, Excel (Power Query, Power Pivot, DAX), SPSS.

#### **Data Visualization**

Matplotlib, Seaborn, Plotly, ggplot2.

## **Statistical & Machine Learning Modeling**

Linear Regression, Econometric Modeling, Time Series, Logistic Regression, Xgboost, Sci-kit learn, Neural Networks.

#### Web Development & Tools

Streamlit, Flask, Django, Supabase.

#### **PROJECTS**

# Personal AI Portfolio Platform with Publishing Space (MSTAG) ☑

03/2025 - Present

- Built a personal platform to showcase data science, ML, and research projects, powered by Supabase, Django, and Vercel.
- Designed and deployed multiple interactive Streamlit apps, including an auto-modeling toolkit for linear/logistic regression and time series analysis.
- Integrated LLM APIs and prompt-routing logic to deliver custom AI responses, and added text-to-image generation using fallback generative APIs.
- Launched **MSTAG**, a creative publishing space within the platform to host projects and articles, complete with role-based access and a full-stack comment system.
- Tracked platform analytics (e.g., user behavior, bounce rate) to iterate on UX and drive engagement.

## Fixed Effects Panel Data Analysis of Spanish Dairy Farms

05/2025 - 05/2025

- Analyzed panel data (247 farms, 1,482 obs) using Cobb-Douglas and Translog models in R.
- Identified key drivers (Cows: 0.66%, Feed: 0.38%, p < 0.001) with increasing returns to scale (RTS = 1.11).
- Ensured robustness with clustered errors and log transformation, achieving ~80% adjusted R2.

#### Time Series Analysis of the Volatility Index ☑

04/2025 - 05/2025

- Applied AR(1) and cubic models to daily VIX data (1990–2025) in R, with 6.67% MAPE and confirmed stationarity (p = 0.188).
- Forecasted VIX levels (19.3–28.65) through 2034, validated with Box-Ljung and Box-Pierce tests.

## **ORGANIZATIONS**

#### **EMAM Organization for Development and Culture**

10/2024 - Present

EMAM Research Center Manager | DataCamp Scholarship Coordinator

- Coordinated scholarship program to provide DataCamp data science courses, enhancing analytical skills for 1000+ participants.
- Managed application reviews and candidate selection, ensuring fair and efficient allocation of educational resources.

• Built a Flask-based web platform for a student research center to manage user accounts, display grades, and support role-based access using Supabase as the backend.

#### **CERTIFICATES**

## **Data Scientist in Python** 🗷

DataCamp — 26 hours | Completed June 2025

## **Associate Data Scientist in Python** □

DataCamp — 90 hours | Completed September 2024

### **Data Analysis with Excel Power Tools**

DataCamp — 10 hours | Completed September 2024

## **CAPMAS - Central Agency for Public Mobilization and Statistics**

Certified 5-day training | Completed July 2025

- Learned SPSS fundamentals, survey design, and economic census methodology
- Gained hands-on experience with Egypt's national enumeration systems and CAPMAS data portal