

# Moataz Mahdy Elmesmary

## BI Developer - Data Analyst

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🔗 Portfolio 📍 Cairo, Egypt 🔄 Moataz-Elmesmary 🛡 Military Service: Completed

### PROFILE

Data Analyst | BI Developer Proficient in **SQL, Power BI, Tableau, Python, Excel, ETL processes, Dashboarding, MSBI Stack (SSIS, SSRS, SSAS) and data warehousing** with a strong ability to transform raw data into actionable insights. Created the **most-starred Data Science Roadmap in MENA** (Top 3% GitHub repositories).

### EDUCATION

**Bachelor's in Computer & Information Sciences (Medical Informatics Dept),** Sep 2019 – Jun 2023  
*Mansoura University*  
**GPA: 3.3 (Very Good) | A+ in Graduation Project**

### EXPERIENCE & INTERNSHIPS

**ITI - Business Intelligence Developer, Information Technology Institute** +4 months ✨ Mar 2025 – present  
**Military Service (Contract Data Analyst), Air-Forces - Future Of Egypt** Mar 2024 – Mar 2025  
**Computer Vision, ITI - 144 hours - Projects** ✨ Jul 2022 – Sep 2022  
**Python for Machine Learning & Data Science, CCIC - 72 hours** ✨ Aug 2021 – Oct 2021  
**Ideation Bootcamp - Developed a final project for a potential startup, Creativa-36h** ✨ Nov 2022 – Dec 2022

### PROJECTS

#### Superstore Sales & Customer Analytics Dashboard (Tableau) ✨

- Built dynamic dashboards with KPIs, trends, and product/customer insights.
- Used advanced charts: forecast, waterfall, lollipop, donut, map, and more.
- Fully linked and story-driven dashboard experience, with drill-down and cross-filtering capabilities.

#### Egyptian Mobile Store Sales Analysis ✨

- Built an **end-to-end sales analytics solution** analyzing 160M+ EGP across 12+ branches.
- Developed **15+ DAX measures** including time intelligence (MoM Change %, Previous Month Sales) and product performance metrics (Percent4G, Profit Margin %).
- **Uncovered key business insights:** Identified 34.8% market share for Samsung, Q4 as peak sales season (16.2M EGP), and 6.4% average profit margin.

#### PowerBI project (Sales Company) ✨

- Prepared data, transformed raw data into a clean, structured format.
- Built dynamic, interactive dashboards, Focused on user experience providing real-time visual representation.
- Provided actionable insights for decision-makers, enabling them to track performance across lots of features.

#### Egyptian Grocery Market Basket Analysis, (Association Rules) ✨

- Extracted frequent itemsets using the **Apriori algorithm**.
- Generate association rules with key metrics: **support, confidence, lift**, etc.
- Directed Network Graph showing the top 20 strongest rules.

#### A Smart Upper-Exoskeleton for Patients with Paralysis - [Graduation Project], Team Leader ✨

- Used **YOLOv7** for Object Detection. - Measured distance and object size.
- Applied **Mask RCNN** for Segmentation and getting the object shape for grasping.
- Applied voice recognition using **Whisper OpenAI**.

#### Diabetes Prediction, Web App Based on ML ✨

- Preprocessed data and trained a **Random Forest model** (85% accuracy).
- Deployed the model using **Flask** for real-time predictions.

#### Car Prices Prediction ✨

- Cleaned the dataset and Visualized trends to identify pricing patterns.
- Applied Classification, **Regression, Hierarchical Clustering**. and K-Means.

#### Signature Restoration, Matlab ✨

- Used Image processing techniques and removed gaussian noise, salt and pepper and fixed the colored signatures.

#### Breast Cancer Detection Using Perceptron and SLP ✨

- Built a Single-Layer Perceptron model for breast cancer classification, achieving 95% accuracy.
- Optimized training performance and visualized weight convergence across epochs.

## SKILLS

**SQL** | **Power BI** | **Excel** | **Tableau** | **DAX** | **Statistics** | **Probability** | **Data Visualization** | **GIT** | **GitHub** | **Data Preprocessing** | **Python** — (Pandas - Numpy - Matplotlib - Seaborn) | **NoSQL-MongoDB** | **Data Modelling** | **Machine Learning Fundamentals** | **Big Data Fundamentals** | **ETL** | **MSBI Stack (SSIS, SSRS, SSAS)**

## AWARDS

**The Ideal Student 2022-2023 (1st Place)**, *Mansoura University* [↗](#) Dec 2022

**Scientific Gallery - Technology Field - (1st place)**, *Mansoura University* Dec 2022  
Participated with our Graduation Project in the 7th edition; awarded a shield certificate.

**Ibtikar contest - Robotics Field - (1st place)** Jan 2023  
Out of 33 projects, we were chosen to represent our university in Ebdaa Contest Stage, hosted by Egypt's Ministry of Youth and Sports.

**Egypt IoT & AI Challenge - (TOP 10)** [↗](#) Sep 2023  
One of the best 10 projects out of 200 GP all over Egypt.

**Made In Egypt Competition (Finalist)**, *Smart World Track* [↗](#) Sep 2023  
Qualified for the final stage out of 131 teams from different governorates of Egypt.

## CERTIFICATES

**Data Science & Machine Learning** [↗](#) **Computer Vision** [↗](#) **Associate Data Analyst in SQL** [↗](#)  
CCIC (Summer Training) – 2021 ITI (Summer Training) - 2022 DataCamp 39h track - 2025

**Math for Data Science** [↗](#) **Ideation Camp Training** [↗](#) **1st Place – Scientific Gallery** [↗](#)  
Alison Course - 2024 Creativa – 2023 Technology Field - 2022

**Data Science Instructor** [↗](#) **ITDS-4 Participation** [↗](#) **Python Programming**  
CIS Team - 2022 Mansoura University - 2020 Udacity - Mahara Tech - 2019

## MENTORING - PROVIDING ONLINE CONTENT

**Data Science Roadmap - GitHub** [↗](#)  
- Created a Reference ranked within the **top 3%** of GitHub repositories **globally** with over **3.7K+** stars on GitHub.  
- Mentored over 70 learners in Data Science field.  
- Made online and offline sessions. - Ran Workshops.

**Data Science Roadmap Explanation - YouTube**, +17K Views [↗](#)

**Intro To Data Science - YouTube**, +13K Views [↗](#)

## INTERPERSONAL SKILLS

- Communication Skills      - Creative Thinking      - Attention to Detail      - Presentation  
- Team Working      - Time Management      - Multi-Tasking      - Leadership

## STUDENT & VOLUNTEERING ACTIVITIES

**CIS Team**, *HR Member 2020 - Media Innovator 2021 - Data Science Squad Instructor 2022*

**Student Union**, *Families Committee Member 2020 - Sports Committee Head 2021 - Scientific Committee Head 2023*

**Students For Egypt**, *Sports Committee Member 2020 - Head Of Sports Committee 2021 - Vice Leader 2022*

**Osbat Elkheir**, *HR Committee Member 2016 - Treasury Committee Head 2018*

## LANGUAGES

**Arabic** **English** **French**  
Native Proficient in Speaking and writing Beginner