

# 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

<b>The Ideal Student 2022-2023 (1st Place)</b> , <i>Mansoura University</i> <a href="#">↗</a>	Dec 2022
<b>Scientific Gallery - Technology Field - (1st place)</b> , <i>Mansoura University</i> Participated with our Graduation Project in the 7th edition; awarded a shield certificate.	Dec 2022
<b>Ibtikar contest - Robotics Field - (1st place)</b> Out of 33 projects, we were chosen to represent our university in Ebdaa Contest Stage, hosted by Egypt's Ministry of Youth and Sports.	Jan 2023
<b>Egypt IoT &amp; AI Challenge - (TOP 10)</b> <a href="#">↗</a> One of the best 10 projects out of 200 GP all over Egypt.	Sep 2023
<b>Made In Egypt Competition (Finalist)</b> , <i>Smart World Track</i> <a href="#">↗</a> Qualified for the final stage out of 131 teams from different governorates of Egypt.	Sep 2023

## CERTIFICATES

<b>Data Science &amp; Machine Learning</b> <a href="#">↗</a> CCIC (Summer Training) – 2021	<b>Computer Vision</b> <a href="#">↗</a> ITI (Summer Training) - 2022	<b>Associate Data Analyst in SQL</b> <a href="#">↗</a> DataCamp 39h track - 2025
<b>Math for Data Science</b> <a href="#">↗</a> Alison Course - 2024	<b>Ideation Camp Training</b> <a href="#">↗</a> Creativa – 2023	<b>1St Place – Scientific Gallery</b> <a href="#">↗</a> Technology Field - 2022
<b>Data Science Instructor</b> <a href="#">↗</a> CIS Team - 2022	<b>ITDS-4 Participation</b> <a href="#">↗</a> Mansoura University - 2020	<b>Python Programming</b> Udacity - Mahara Tech - 2019

## MENTORING - PROVIDING ONLINE CONTENT

<b>Data Science Roadmap - GitHub</b> <a href="#">↗</a> <ul style="list-style-type: none"><li>- Created a Reference ranked within the <b>top 3%</b> of GitHub repositories <b>globally</b> with over <b>3.7K+</b> stars on GitHub.</li><li>- Mentored over 70 learners in Data Science field.</li><li>- Made online and offline sessions. - Ran Workshops.</li></ul>
<b>Data Science Roadmap Explanation - YouTube</b> , +17K Views <a href="#">↗</a>
<b>Intro To Data Science - YouTube</b> , +13K Views <a href="#">↗</a>

## 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

<b>Arabic</b> Native	<b>English</b> Proficient in Speaking and writing	<b>French</b> Beginner
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