Moataz Mahdy Elmesmary

BI Developer - Data Analyst

moataz.mesmary@gmail.com +201000033506 in https://www.linkedin.com/in/moatazelmesmary/

PROFILE

Data Analyst | BI Developer Proficient in SOL, 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, T - 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.

- 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

Dec 2022

Jan 2023

Scientific Gallery - Technology Field - (1st place), Mansoura University

Participated with our Graduation Project in the 7th edition; awarded a shield certificate.

Ibtikar contest - Robotics Field - (1st place)

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 2 CCIC (Summer Training) - 2021 DataCamp 39h track - 2025 ITI (Summer Training) - 2022

Math for Data Science □? Ideation Camp Training 1St Place - Scientific Gallery 🛮 Alison Course - 2024 Creativa - 2023 Technology Field - 2022

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 - Attention to Detail - Presentation - Creative Thinking - 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