Moataz Elmesmary

BI Developer - Data Analyst

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,

Mar 2025 - present

Information Technology Institute - Intensive Code Camp (ICC) +4 months ☑

Military Service (Contract Data Analyst), Soldier in the Air Forces (Future Of Egypt)

Mar 2024 - Mar 2025

Computer Vision, ITI Summer Training - 144 hours - Projects ☑ Python for Machine Learning & Data Science, CCIC - 72 hours ☑

Jul 2022 - Sep 2022 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).
- Extracted key insights: company market shares and product metrics (COGs, Net Profit, 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**.
- Generated 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 extracting 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, bested by Egypt's Ministry of Youth and Sports

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 □
ITI (Summer Training) - 2022Associate Data Analyst in SQL □
DataCamp 39h track - 2025Math for Data Science □
Alison Course - 2024Ideation Camp Training □
Creativa - 20231St Place - Scientific Gallery □
Technology Field - 2022

Data Science Instructor□ITDS-4 Participation□Python ProgrammingCIS Team - 2022Mansoura University - 2020Udacity - 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
 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

ArabicEnglishFrenchNativeProficient in Speaking and WritingBeginner

ADDITIONAL INFORMATION

Military Service, Soldier (Air Forces)
Completed

Jan 2024 - Mar 2025

- Contract Data Analyst & IT Help Desk