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) **Computer Vision,** ITI Summer Training - 144 hours - Projects ☑

Mar 2024 - Mar 2025

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).
- 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**.
- 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.

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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 ☑
CCIC (Summer Training) – 2021Computer Vision ☑
ITI (Summer Training) – 2022Associate Data Analyst in SQL ☑
DataCamp 39h track - 2025Math for Data Science ☑Ideation Camp Training ☑1St Place – Scientific Gallery ☑

Alison Course - 2024 Creativa – 2023

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

- Contract Data Analyst & IT Help Desk

Jan 2024 - Mar 2025

Technology Field - 2022