

Mahmoud Mousa

Data Analyst | Data Scientist

📍 Riyadh, Saudi Arabia | ✉ mahmoudmosaadmousa@gmail.com | 📞 0583514747

in [linkedin.com/in/mahmoudmousa-ds](https://www.linkedin.com/in/mahmoudmousa-ds) | 🐙 github.com/mahmoudmousa-ds | 🌐 My Portfolio

Summary

Certified Data Analyst and Data Scientist with hands-on experience in the Saudi market, currently working as a Data Analyst within the consulting team at the Royal Commission for Riyadh City. Computer Engineering graduate with strong expertise in Python, SQL, Power BI, and cloud platforms, owning the end-to-end data lifecycle from data lineage, integration, and cleansing to executive reporting and BI solutions—and transforming complex datasets into actionable insights that drive operational efficiency and C-level decision-making.

Education

Faculty of Graduate Studies for Statistical Research, Cairo University 2024 – Present
Data Science Master's Degree (In Progress)

Faculty of Engineering in Shoubra, Benha University 2018 – 2023
Bachelor's Degree in Computer Engineering, Graduation Project Demo

Work Experience

Data Analyst, Royal Commission for Riyadh City May 2025 – Present

- Led the end-to-end O&M data pipeline across multiple sources, ensuring data quality through cleansing, validation, and EDA.
- Delivered executive Power BI dashboards and reports enabling C-suite performance tracking and data-driven decision-making.
- Defined and implemented standardized KPIs, aligning cross-functional teams to ensure consistent reporting.
- Managed IBM Maximo data collection and governance, coordinating stakeholders to improve data accuracy and operational readiness.

Data Scientist, African Waves Communication July 2023 – April 2025

- Led data integration efforts by unifying multiple data sources into scalable pipelines supporting business insights and ML models.
- Built and deployed ML models, improving predictive accuracy by 15–20%.
- Built executive dashboards to support data-driven decisions, reducing reporting time by 30 % and improving data reliability.

Data Scientist & ML Engineer, Technocolabs Softwares | Remote March 2023 – June 2023

- Fine-tuned and deployed ML models on AWS, improving accuracy by 15%.
- Scraped and processed unstructured data for business insights.

Freelancer | Remote June 2020 – June 2023

- Analyzed structured, unstructured, and imbalanced datasets using Python and SQL Server for company-level reporting and decision support.
- Transitioned into Data Science: built and deployed machine learning models, delivering 30+ successful projects across multiple domains.
- Delivered NLP solutions for client projects, including text classification.
- Maintained, monitored, and improved delivered solutions based on client feedback and evolving business needs.

Courses and Certificates

Microsoft Certified: Power BI Data Analyst Associate (PL-300)
Oracle Cloud Infrastructure 2025 Certified Foundations Associate
Certified Data Analyst Professional by Epsilon AI Institute
Transact-SQL Queries Using SQL Server by Mahara-Tech
Data Analyst in Power BI by DataCamp
Associate Data Analyst in SQL by DataCamp
Certified Data Scientist Professional by Epsilon AI Institute
Database Fundamentals by Mahara-Tech
Artificial Intelligence Course by Huawei Academy
Cisco Certified Network Associate, National Telecommunication Institute
IT Fundamentals for Cybersecurity Specialization by Next Technology Leaders

Technical Skills

Programming: Python
Databases: SQL, PostgreSQL, TSQL, Data Warehousing, Query Optimization
Data Science Tools: Pandas, NumPy, Scikit-Learn, TensorFlow, Statistics, Data Management & Wrangling
Business Intelligence: Power BI, Tableau, Google Looker, Dashboard Development
Web Scraping: BeautifulSoup, Scrapy, Requests
Machine Learning: Supervised & Unsupervised Learning, Model Development, Feature Engineering
Data Engineering: ETL Pipelines, Data Preprocessing, API Development, Workflow Automation
Cloud & DevOps: AWS, Digital Ocean, Azure, Model Deployment
Development Tools: Git, Linux, VS Code, Postman, Jupyter Notebook
Productivity Tools: Microsoft Office (Excel, PowerPoint, Word, Outlook)

Professional Skills

Communication, Time Management, Critical Thinking, Stress Management, Adaptability, Decision Making, Problem Solving, Team Management, Team Collaboration & Project Management, Versatility, Fast Learning Ability

Projects

GitHub Repository: github.com/mahmoudmousa-ds/portfolio

Data Science & Machine Learning

- **Company Success Prediction:** Developed ML models to predict company success and deployed them on AWS.
- **Recommendation Systems:** Built personalized movie and music recommendation systems.
- **Predictive Modeling:** Created models for flight delay predictions and BigMart sales forecasting.
- **Customer Segmentation & Promotions:** Grouped customers using data to boost campaign results. Used k-means and RFM methods."

Data Analytics & Visualization

- Conducted data-driven analysis using Excel, Power BI, Tableau, ,SQL and Python to uncover business insights.
- Built interactive dashboards to track KPIs, sales trends, and customer behavior.
- Automated ETL processes for data cleaning and transformation, reducing manual effort by 40%.

Data Engineering & Web Scraping

- **Real Estate Analysis:** Scraped and analyzed Bayut data to uncover market trends and insights.
- **Recruitment Insights:** Web scraped Wuzzuf data with BeautifulSoup to enhance hiring decisions.
- **Data Processing:** Cleaned and transformed data for analysis readiness.

Languages

- Arabic | Mother Tongue
- English | B2 level, Very Good (Writing, Reading, Listening and Speaking)