Osama Ahmed Mohamed Amer

Data Science & Analytics Analyst

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GitHub Portfolio

Cairo, Egypt | 01024954397

Final-year Bioinformatics student at the Faculty of Computer and Information Science skilled in data analysis with SQL, Python, and Excel. Proficient in machine learning and deep learning Projects, seeking a Data role to deliver actionable insights.

Education

University of East London & Ain Shams University   2020 - Jul 2025 (Expected)

Bachelor's degree at Bioinformatics and Information science

Certifications & Training

- **Potentai's Summer Training 2024 (4 Week Big Data Workshop)**
- As part of the first-place "No Vision" team, built a PySpark ETL pipeline to process customer, loan, financial, and time CSVs—computing average income, total debt, and credit-score segments.
- **APPLAI Machine Learning Winter Workshop 2024 (4 Week Hands-On ML)**
- Completed an end-to-end ML pipeline in Python: performed data preprocessing and feature selection, trained logistic regression and KNN models, and evaluated accuracy and precision.

Projects

Machine and Deep Learning Projects

Brain tumor Detection and Staging   Sep 2024 – Present

- Developed a two-stage deep learning pipeline to first classify brain MRI images into four categories (Glioma, Meningioma, Pituitary, No Tumor) and then determine tumor size and location.
- Trained and validated an EfficientNetB3 classifier, achieving 99% validation accuracy.
- Built and trained a U-Net segmentation model on a specialized dataset with data augmentation, achieving a 0.89 validation Dice score.
- Deployment: Integrated both models into a final inference pipeline designed to process user-uploaded images and generate both quantitative reports and visual overlays.

Animal Kingdom Classification   May 2024 - Jul 2024

- Built a TensorFlow/Keras pipeline with real-time augmentation (flips, rotations, brightness) and balanced 18 classes via oversampling. Fine-tuned VGG19 and Mobile Net backbones

Data Analysis Projects

Bike Sales Analysis & Dashboard   Dec 2023 - Jan 2024

- Interactive Bike Sales Dashboard: Processed 1,000 records in Excel (IF, VLOOKUP, pivots) and created dynamic charts, slicers, and filters to analyse sales by age, region, and income.

[Netflix Data Visualization & Insights Reporting](#)   June 2024 - June 2024

- Analyzed Netflix Titles dataset using R (tidyverse, ggplot2) to visualize content strategy trends.
- Preprocessed data, standardizing features like duration/dates and handling missing values.
- Created 7 charts (pie, histogram, etc.) illustrating findings on content types, release years, ratings, and themes for a project report.

SQL COVID-19 Data Analysis   May 2024 - Jul 2024

- Developed T-SQL queries (CTEs, window functions, temp tables, views) to analyse country-level infection/death rates, population impact, and vaccination rollouts.

Nashville Housing Data Cleaning   Feb 2025 – Mar 2025

- In T-SQL, converted sale timestamps to dates, filled missing addresses, split address and owner fields into separate columns, normalized Y/N flags, removed duplicates, and dropped unused columns.

Software Development Projects

Spotify App Clone   Mar 2022 – Apr 2022
- Built Main features and generated crystal reports for a Spotify-like platform using C++ and .Net.

Tazkarty: Oracle APEX Ticketing   Feb 2023 – Mar 2023
- Developed an Oracle APEX ticketing system with a PL/SQL database, interactive master–detail views, triggers, and reporting.

Languages
- Arabic, English (upper intermediate)

Core Skills

Programming Languages
• Advanced: Python, SQL

• Intermediate: R, C++

Data Analysis & Visualization
•Pandas, NumPy, Excel (PivotTables, VLOOKUP**)**

• Power BI, Tableau, Matplotlib, Seaborn

Machine and Deep Learning
• scikit-learn, TensorFlow (Keras)

• Deep Learning & Transfer Learning

• PySpark & ETL Pipelines

Tools & Collaboration
• Git, Docker

• Jupyter Notebooks, Google Colab

Soft Skills
• Teamwork : Collaborated on a 4-6 persons on many projects

• Communication: Prepared reports & presentations.