

Osama Ahmed Mohamed Amer

Data Science & Analytics Analyst

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[GitHub Portfolio](#)

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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.

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.