# ELMONZER BAYOUMI

## **Professional Summary**

Motivated data scientist with a Bachelor's degree in Mathematics and Computer Science and 5 years of experience in IT support and technical problem-solving. Skilled in data analytics, machine learning, and data visualization, with a strong foundation in Python, SQL, and data storytelling. Completed the Google Data Analytics Professional Certificate and developed a sentiment analysis project using Sudanese and English language datasets. Adept at building predictive models and turning complex business problems into actionable insights. Eager to contribute to innovative, data-driven teams and create real-world impact through data science.

#### **Skills**

- Programming & Tools: Python, SQL, R (basic), Git, Excel, Google Sheets
- Data Handling: Data Cleaning, Wrangling, Feature Engineering, EDA
- Visualization: Tableau, Matplotlib, Seaborn
- Natural Language Processing: Text Preprocessing, TF-IDF, Sentiment Analysis (Arabic & English)
- Machine Learning: Supervised & Unsupervised Learning,
  Model Evaluation, Hyperparameter Tuning, scikit-learn
- Other: IT Troubleshooting, System Admin, Networking
- **Soft Skills:** Problem Solving, Analytical Thinking, Team Collaboration, Technical Communication

#### **Projects**

#### DIABETES PREDICTION WITH MACHINE LEARNING-GitHub-Personal Project

2025

- Explored and analyzed a public diabetes dataset to understand key trends and feature relationships
- placed zero values in features (e.g., Glucose, BMI) with the column mean to address missing data
- Applied oversampling techniques to balance class distribution and improve model performance
- Performed feature scaling and trained multiple models including Logistic Regression, SVM, and Random Forest
- Achieved a model accuracy of 88% and visualized results using confusion matrix and ROC curves

## SENTIMENT ANALYSIS ON MOBILE APP REVIEWS-GitHub- Personal Project

2024

- Conducted sentiment analysis on 6,000+ mobile app reviews in Sudanese Arabic and English, using real-world user data from a local banking app
- Used Python (Pandas, NLTK, scikit-learn) for data cleaning, preprocessing, and feature extraction (TF-IDF)
- Built and compared multiple machine learning models (SVM, Random Forest, Logistic Regression), achieving 97% accuracy
- Visualized most common words, sentiment trends, and model results using Matplotlib and WordClouds

#### **Work Experience**

#### IT SUPPORT SPECIALIST – Pemeco Industrial Supplies Co. Ltd (HILTI Agent) – Khartoum, Sudan

Feb 2018 - Apr 2023

- Provided comprehensive hardware, software, and network support to users across departments
- Diagnosed and resolved system issues, reducing downtime by 25% through proactive maintenance
- Collected and analyzed incident logs to identify recurring problems and propose process improvements
- Maintained system documentation and IT asset inventories for audit and compliance purpose

# MATHEMATICS TEACHER - Private Tutoring - Cairo, Egypt

Jun 2023 - May 2025

- Taught mid school-level students mathematics covering topics such as algebra, geometry, and statistics
- Developed personalized lesson plans to suit various learning levels and improve understanding
- Used real-life examples and visual aids to explain complex concepts
- Mentored students and assessed their performance using data-driven methods and structured feedback
- Promoted analytical thinking and built strong communication skills through student engagement and tutoring

## **Education**

# **BACHELOR OF SCIENCE IN COMPUTER SCIENCE AND MATHAMTICS** – University of Khartoum

Mar 2023

GPA: 3.02 | Second Class Upper

Majors: Probability & Statistics, Linear Algebra, Data Structures & Algorithms, Databases

# Certifications

## GOOGLE DATA ANALYTICS PROFESSIONAL CERTIFICATE - Coursera

Nov 2023

• Gained proficiency in data cleaning, SQL queries, data visualization, R basics, problem-solving, and data storytelling

#### Languages

**Arabic**: Native **English**: Professional

German: Upper-Intermediate