

Professional Summary

Motivated data scientist with a Bachelor's degree in Computer Science and Mathematics 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 (Pandas, NumPy, scikit-learn), 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

Replaced 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
- TEACHING ASSISTANT –University of Khartoum – Faculty of Mathematical Science and informatics

Jun 2025 – Present

Delivered weekly tutorials and learning materials for undergraduate students in Topology

Designed and maintained a streamlined platform for assignment submissions and tracking

Collected and recorded student grades, ensuring accuracy and timely reporting

Coordinated with faculty and fellow assistants to maintain grading consistency and academic integrity

Supported students through personalized feedback and clarification of tutorial content

- Taught middle 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

- 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 purposes

Education

Certifications

Languages

Arabic: Native
English: Professional
German: Upper-Intermediate