ALAETO MARYJANE CHINENYENWA

PROFESSIONAL SUMMARY

A passionate and experienced Data Science and Machine Learning enthusiast with a strong foundation in analytical thinking and problem-solving. I combine technical skills with excellent communication abilities to explain complex concepts in simple terms. With hands-on experience in projects, personalized tutoring, and a love for teaching, I am committed to helping others understand and apply data science and machine learning in practical settings.

RELEVANT EXPERIENCE

Machine Learning Tutor

Self-led Tutoring Initiative 2024 – Present

- Delivered one-on-one tutoring sessions focused on Python, machine learning algorithms, and real-world data science project development.
- Broke down complex topics into engaging, digestible lessons tailored to the student's learning style.
- Provided mentorship on project structuring, data preprocessing, and model evaluation using Scikit-learn.
- Successfully helped student complete multiple end-to-end projects, improving their technical confidence and coding ability.

PROJECTS EXPERIENCE

Selected to Demonstrate My Teaching & Technical Expertise

Rain in Australia - Predictive Analytics

- Taught model comparison using Random Forest, XGBoost, logistic regression, and decision trees.
- Explained key weather features influencing predictions through interactive data visualizations.

SVM Cancer Detection – Healthcare Analytics

- Demonstrated SVM model building, data cleaning, and evaluation metrics like recall and precision.
- Used medical datasets to teach feature engineering and model optimization.

Customer Segmentation – Telecom Use Case

- Guided classification modeling with KNN, focusing on practical challenges like unbalanced datasets.
- Led student through hands-on preprocessing and model validation.

Content-Based Recommendation System – NLP Application

- Explained TF-IDF, cosine similarity, and recommendation logic using Instagram profile metadata.
- Encouraged experimental thinking in improving relevance through feature tuning.

Real Estate Price Prediction - Regression Modeling

- Taught linear and Lasso regression, and how to use XGBoost for numerical predictions.
- Discussed trade-offs between interpretability and performance in model selection.

TECHNICAL SKILLS

- Languages & Tools: Python (Pandas, NumPy, Scikit-learn), SQL, Power BI, Jupyter Notebook
- **Databases:** PostgreSQL, MySQL
- Machine Learning: SVM, Random Forest, Regression, XGBoost, KNN
- Visualization & Reporting: Matplotlib, Seaborn, Power BI
- Web Frameworks (Basic): Flask, FastAPI
- **Soft Skills:** Strong communication, patience, adaptability, critical thinking, teamwork, self-motivation

EDUCATION