Adu, Ayomide Oluwanifesimi

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PROFESSIONAL SUMMARY

AI/ML Engineer with hands-on experience in Python, data analytics, machine learning, and deep learning. Proficient in building AI-driven solutions, including NLP-based applications, computer vision models, and AI-powered automation. Strong foundation in data analysis, model training, and web integration using Flask. Passionate about leveraging AI to solve real-world problems and continuously advancing in the field.

EDUCATION

Federal University of Technology, Akure (FUTA)

- M.Eng. in Civil Engineering (Awaiting result)
- B.Eng. in Civil Engineering (2016-2021)

Robotics and Artificial Intelligence Nigeria (RAIN), Ibadan

Artificial Intelligence & Deep Learning Trainee (June 2024 – May 2025)

- Developed expertise in supervised and unsupervised learning, recommenders' systems, NLP, deep learning, and model deployment.
- Hands-on projects applying data science techniques to real-world problems.

TECHNICAL SKILLS

- **Programming:** Python
- Data Analytics & Visualization: Tableau, Matplotlib, Seaborn, pandas
- Machine Learning: Scikit-learn (Supervised & Unsupervised Learning)
- Database Management: MySQL, PostgreSQL
- **Deep Learning:** TensorFlow, Keras (Computer Vision, NLP, GANs)
- Web Frameworks: Flask, HTML, CSS
- Version Control: Git
- Cloud & Deployment: Python anywhere, vercel, basic knowledge of AWS

PROFESSIONAL PROJECTS

Applied Machine Learning Projects

- ✓ Tools: Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn
- ✓ Worked on real-world datasets including Stroke Prediction, Titanic Survival, Liver & Heart Disease Diagnosis, Loan Approval, USA Housing Prices, and Diamond Pricing.

Key tasks and techniques included:

- Data Preprocessing: Handling missing values, outliers, and class imbalance; encoding categorical variables.
- Feature Engineering & Selection: Identified relevant features using different methods.

- Model Building: Applied logistic regression, decision trees, random forest, XGBoost, and support vector machines.
- Model Evaluation: Used cross-validation and performance metrics such as accuracy, precision, recall, F1-score, and ROC-AUC.
- **Hyperparameter Tuning**: Employed GridSearchCV and RandomizedSearchCV for optimization.
- Workflow Automation: Built end-to-end machine learning pipelines using Pipeline, FeatureUnion, and ColumnTransformer.

LLM-Powered Chatbot with LangChain and Multi-Model Support

- Built a smart chatbot using LangChain, integrating GPT-40-mini, Claude, Mixtral, and LLaMA.
- Connected it to external tools like Wikipedia and DuckDuckGo for factual and real-time info retrieval.
- Designed prompt templates, memory management, and routing between models.

Sales Data Analysis & Business Insights

- Worked on a sales dataset to extract key business insights using SQL and Python.
- Performed exploratory data analysis (EDA) to identify revenue trends and customer behaviors.
- Familiar with association rule learning (Apriori algorithm) for analyzing product relationships.

Sample Superstore Dashboard (Tableau Visualization)

- Designed interactive dashboards using Tableau to analyze sales, profit trends, and customer demographics.
- Applied data visualization techniques to uncover insights and improve business decision-making.
- Presented findings using dynamic charts, graphs, and KPI tracking.

AI Content Detection Platform

- Developed a web-based app to detect AI-generated text.
- Utilized language model prompts and keyword analysis techniques.
- Deployed using Vercel; performed well under manual testing.

SOFT SKILLS

- Fluent in English (written & spoken)
- Fast learner, adaptable, and eager to contribute
- Ability to work independently and under supervision
- Problem-solving & analytical thinking
- Effective communication and teamwork
- Time management & multitasking

REFERENCES

Available on request.