AMAH A. Daniel
Machine Learning Engineer

Experienced Machine Learning Engineer with a demonstrated history of working in the field of Customer Behavior Analysis and Customer Lifecycle Management. Skilled in R, Python, TensorFlow, PyTorch, SQL and GCP Cloud Technologies. Strong engineering professional pursuing a Master's degree focused on Business Automation.

Experience

12/2023 - Present
Data Analyst
WEMA Bank PLC
* Extracted, transformed, and loaded (ETL) data from various sources, including app DBs, flat files, and web services, into Oracle data warehouse.
* Designed and implemented an automated data integration solution using Microsoft SQL Server Integration Services (SSIS).
* Automating processes that deep-dive data analytics to identify trends, patterns, and generate insights on Payments/Transfer, Customer Service/TATs, Loans/Requisitions and Deposits/Withdrawals management, and used Power BI to develop Dashboards used by Executives.
* Querying, transforming, and creating views in Azure datalake for front-end reports on large customer transactions data in Azure Synapse Studio with Spark SQL.
* Modelling Predictive advisory on Onboarding, Churn, Tier Migration, Service failure, etc with R, Python.
* Query optimization and version control with Azure DevOps and Git

11/2021 - 12/2023
Team Lead, Customer Behavior Analysis | CLM
Polaris Bank LTD
* Led a group of segmentation managers in analyzing customer behavior, which resulted in a 20% increase in customer retention. This was achieved through the development and deployment of machine learning models for predicting customer churn, achieving conversion by 30%.
* Streamlined the data collection and preparation process, reducing data cleaning time by 50%. This involved automating the collection, cleaning, and analysis of large datasets from various sources/API calls catering to thousands of customers on a daily basis using SSMS, R, and PowerQuery.
* Optimized hyperparameters of machine learning models using grid search, achieving a 15% improvement in model performance. Furthermore, I collaborated with the ML engineering team to develop and deploy scalable data pipelines and models using Python, SQL, and Azure cloud platforms.
* Introduced new feature engineering techniques that improved model interpretability and performance. Additionally, I applied advanced statistical and machine learning techniques to extract insights and generate reports for clients and stakeholders, raising transaction volumes in billions from resulting targeted campaigns.
* Ensured the scalability and efficiency of ML systems, enabling real-time predictions on large volumes of data.

12/2020 - 11/2021
Data Analyst
SurveyPlus LTD
* The automation of data collection and analysis processes, along with the deployment of efficient machine learning models, led to a significant reduction in the operational costs of the business. Specifically, we were able to cut down on manual labor costs and reduce the time spent on data preparation by 50%.
* Played a key role in developing a fraud detection system using advanced machine learning techniques. This system was able to identify and prevent fraudulent activities, saving the company millions in potential losses.
* The fraud detection system not only prevented financial losses but also helped in improving the company's reputation and customer trust. This indirectly contributed to an increase in customer retention and a decrease in customer acquisition costs.

01/2020 - 12/2020
Info. Technology / Teaching and Advice
Salem Secondary School
* Designed and delivered engaging lessons on programming, web development, data analysis, and machine learning.
* Mentored students on their projects and helped them develop their skills and interests in Information Technology.
* Incorporated real-world examples and applications of AI into the curriculum and to inspire students to pursue further education or careers in this domain.

04/2019 - 12/2019
Machine Learning Intern
Coven Labs
* Curated and Outlined ML content and Review Sessions for monthly Data Analysis Bootcamps.
* Monitored conversion metrics with Google Analytics and Google My Business.
* Performed other duties and followed through on work commitments.

06/2017 - 10/2018
Research Assistant
Dept. Demography and Social Statistics,
* Built and maintained a data pipeline, using software packages: SPSS & STATA, from ODK to MS Excel to create exploratory analysis on target features that influenced Retirement Lifestyle among the aged in South-western Nigeria.
* Produced and submitted a comprehensive report on Family Planning among fecund female adults in Ilesa-west LGA, Osun State.
* Performed other duties and followed through on work commitments.

Education

12/2022 - Present
National Open Univeristy, Nigeria
* Pursuing a Masters in Business Administration

04/2014 - 04/2018
Obafemi Awolowo University, Ile-Ife, Osun State
* Pursued BSc in Applied Statistics, achieved 4.39/5.0 CGPA in Demography & Social Statistics.
* Presented Paper on Evaluative Statistical methods in Age Misreporting/Heaping.

Personal Info — Portfolio

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danielamahtoday@gmail.com

LinkedIn
linkedin.com/in/daniel-amah-2559a4159/

Skills & Projects

RECOMMENDERS			
GoogleAddOn GCP and Google Apps Script	**Dashboards** Tableau Public - MDX, OLAP	**R Markdown** Exploratory Data Analysis, Regression Analysis, Automated Publishing	**Kaggle Notebooks** Clustering algorithms, Decision trees, Ensemble methods, Component Analysis, Logistic Regression, Communication, Critical thinking, Problem Solving, Project Management
End To End Medical Charges Streamlit & Google Sheets	**LLMs - ChatGPT** Microservices	**Automated EDA**	
	LLMs - Cohere Idea Generator	**ML Blog**	

DATA ENGINEERING	
Designing a Bank's Database	

COMPUTER VISION		
Drowsiness Detection	**Pose Estimation (MediaPipe)**	**Object Count, Detection and Segmentation**
Facemesh Mask	**Brain Tumor Detection**	

Software & Programming Languages

* Programming Languages: **Python, R, SQL, Google Apps Script**
* Machine Learning Libraries: **TensorFlow, PyTorch, Scikit-learn, tidymodels, Vetiver**
* Data Visualization Tools: **Power BI, Tableau, GGPlot/RMarkdown, Seaborn**
* Big Data Tools: **Hadoop, Spark**
* Orchestration: **Apache Airflow, Prefect, Airflow, mage, dbt**
* Cloud Platforms: **AWS, Google Cloud**
* Web/Dev: **Django | Flask | Streamlit**

Professional Certficates

2024 Microsoft
AI Engineer (Associate)

2024 Data Scientist
DataCamp

2023 Google Data Analytics
Google

2022 Data Analytics in Banking
Chartered Institute of Bankers, Nigeria

2021 Data Warehousing
Udemy

2021 Azure Fundamentals
Microsoft Corp.

2021 Graduate Trainee
Polaris Bank LTD

2020 Data Analytics & Consulting Internship
Forage, KPMG

Papers & Presentation

2024 "Towards Fairness and Efficiency: A Low-Weight Computer-Aided Model for Melanoma Detection with Racial Bias Handling." (Review)

2018 "Evaluation of Household Age Data in the Nigerian Demographic and Health Survey, 2013."

2017 "Mass Media: Assessing Fertility Rates with Family Planning, A case study of Ilesha, Osun State"