

Abraham Enyo-one Musa

Data Science and Analytics Professional

+44 (0)7776506636 || Cardiff, United Kingdom

enyoone3@gmail.com || <https://www.linkedin.com/in/abseejp> || <https://abraham-musa.medium.com/> || <https://github.com/abseejp>

PROFESSIONAL SUMMARY

Experienced and results-driven Data Science and Analytics Professional with over **4 years of expertise** in crafting sophisticated **data science and machine learning solutions** that empower businesses to make strategic decisions and achieve impactful outcomes. Proficient in **data mining, statistical analysis, data visualization, and predictive modeling**, I specialize in distilling actionable insights from intricate datasets and presenting them with clarity.

My strengths lie in the intersection of strategic thinking, technical prowess, and creative problem-solving. I bring a **proven track record of delivering exceptional results across diverse projects**. Beyond technical skills, I am recognized for my strong work ethic, effective leadership, and adept stakeholder management. I am passionate about continuous learning, with a penchant for researching and creating technical content during my free time.

SKILLS

Data Science and Machine Learning:

- Data Science, Data Analytics, Data Mining, Machine Learning (supervised/unsupervised), Timeseries Analysis, Timeseries Forecasting (ARIMA(X), SARIMA(X), etc.), Descriptive, Diagnostic, Prescriptive, Predictive Analysis.
- Pandas, Numpy, Plotly, Matplotlib, Deep Learning, Keras, Tensorflow, Scikit-Learn, Kubeflow.

Data Analysis and Visualization:

- Data Transformation, Exploratory Data Analysis, A/B Testing.

Programming and Development Environments:

- Python, SQL, PySpark.
- Jupyter Notebook, JupyterLab, Anaconda, Google Colab.

Cloud Technologies and Deployment:

- Google BigQuery, DataBricks, Sagemaker, DataRobot, Git, BitBucket, Github, Azure DevOps, API Development (Flask), AWS, GCP, Architecture Design.

Business Intelligence:

- Google Looker, Metabase, Power BI, Tableau.

Other Expertise:

- Artificial Intelligence, Building Modular Python (Explainability) Frameworks, Credit Risk Modeling, Customer Analytics, Agile Methodologies (Scrum and Kanban), Geocoding (Forward, Backward), Data Quality Management.
 - Microsoft Office (Excel, Word, PowerPoint).
-

PROFESSIONAL WORK EXPERIENCE

DATA SCIENTIST, ADMIRAL GROUP PLC (FEBRUARY 2022 - PRESENT) - 1 YEAR 11 MONTHS

Location - Cardiff, United Kingdom

Time Series Forecasting Model:

- Developed a **highly accurate time series forecasting model** for predicting call volumes, optimizing staffing levels, and enhancing service delivery. The model forecasts inbound call volumes, with a **forecast horizon of at least 180 days**, providing useful insights for long-term planning.

- Achieved a **10% improvement in forecasting accuracy**, leading to improved answer rates, efficiency, and cost savings.

Data Reconciliation Project:

- Led a company-wide **data reconciliation project on streaming data**, enhancing data reliability, quality, and accuracy by **over 50%**.
- Achieved tangible outcomes, such as **improved ML model performance**, and **reduced time** spent on Exploratory Data Analysis (EDA) and Model Deployment.

Customer Segmentation Model Development:

- Currently leading the development and implementation of a Python-based customer segmentation model to optimize marketing strategies and improve customer targeting.
- Aiming to achieve measurable results that align with the marketing team's objectives, enhancing overall campaign effectiveness and customer engagement.

Cross-Functional Analysis of Customer Intent Data:

- Led cross-functional analysis of customer intent data, implementing data-driven recommendations that **boosted sales by 20%**, contributing significantly to organizational success.

Data Analysis and Visualization:

- Built a real-time **Google Looker dashboard** and LookML template for monitoring sales and cancellations metrics, offering insights into customer intents and enhancing routing decisions.
- Developed a reusable Python-based data analysis framework, utilizing object-oriented programming principles. **Provided insights into the correlation between customer intents and business metrics** (such as sales and cancellations), enabling data-driven decision-making and improving overall metrics.

Automated Dashboard Creation:

- Developed a Python framework automating Google Looker Views, Models, and LookML Dashboard generation.
- Reduced dashboard creation time from over **1 day to under 10 minutes**, significantly boosting productivity and expediting data-driven decision-making.

DATA SCIENTIST, FAIRMONEY MICROFINANCE BANK (SEPTEMBER 2021 - FEBRUARY 2022) - 6 MONTHS

Location - Lagos, Nigeria

Identification and Exploration of Predictive (Financial and Non-Financial) Variables:

- Analyzed third-party data sources (such as SMS data) to identify **100+ financial and non-financial predictive variables** for building optimal machine learning models, streamlining the feature selection process.
- Successfully incorporated these predictors into machine learning models, leading to a significant improvement in data-driven decision-making.

Efficient Regex Development:

- Developed and implemented highly efficient regex (regular expressions) for parsing information from a **vast SMS dataset of over 150 million messages**.
- This led to a **40% improvement in parsing coverage**, enabling comprehensive and more accurate data analysis.

Built Data Extractors using Python Object-Oriented Programming:

- Utilized Python **object-oriented programming principles** to create extractors for computing and extracting aggregated features from SMS data stored in Google BigQuery.

Optimization of Data Product Deployment Process:

- Collaborated with the software engineering team to streamline data product deployment timelines, reducing them by **80% from 2+ months to < 2 weeks**.
- Led the execution of deployment tasks and implemented process improvements that contributed to a significant boost in efficiency.

Code Review and Data Documentation:

- Enhanced team performance by reviewing code, standardizing data documentation, and developing reusable SQL queries to extract valuable data and features from **Google BigQuery**.

DATA SCIENCE INSTRUCTOR, DATA JEDI (OCTOBER 2021 - DECEMBER 2021) - 3 MONTHS

Location - Lagos, Nigeria

- I served as a data science instructor for the online training conducted by Data Jedi. My primary role involved aiding data science enthusiasts and junior data professionals in gaining a deeper understanding of data science techniques, tools, and methodologies. You can view recordings of my sessions with the students by following [this link](#).

DATA SCIENTIST/ML ENGINEER, INDICINA TECHNOLOGIES LIMITED (NOVEMBER 2019 - AUGUST 2021) - 1 YEAR 9 MONTHS

Location - Lagos, Nigeria

Machine Learning, and Credit Scoring Models:

- Consulted for **leading financial institutions** in Nigeria, including [Union Bank](#), [LSETF](#), [Flutterwave](#), [Zedvance](#), and [Moove](#).
- Developed and implemented machine learning models, achieving an **impressive average AUC of 85%**.
- Enabled data-driven decisions, mitigated financial risks, and built **credit scoring models** by combining data from various sources. Implemented rigorous unit test cases for optimal functionality.

Bank Statement Analysis Engine:

- Developed core logic and predictive features for [Indicina's flagship bank statement analysis engine](#), leveraging over **3 million bank statements**.
- Successfully deployed the analysis engine, resulting in a **20% increase in client acquisition**, a **40% boost in monthly recurring revenue**, and a **20% rise in client retention**.

End-to-End Data Analysis:

- Performed end-to-end data analysis tasks, including data mining, aggregation, exploration, modeling, visualization, and machine learning model training.

Cohort Analysis on Loan Disbursements:

- Conducted cohort analysis on past loan disbursements, analyzing **loss ratios across different touchpoints** such as sectors and time of disbursement.

Data Science Documentation:

- Developed **comprehensive data science documents** on Confluence, reducing onboarding time for new team members and facilitating quick contributions to the team's success.

Collaboration and Initiative:

- **Collaborated with the management team** to enhance the company's growth through initiatives improving visibility and driving business outcomes.
- Worked with product and engineering teams to **enhance data and model life cycle** functionality by developing and integrating necessary APIs for seamless integration into various electronic channels.

EDUCATIONAL BACKGROUND

B.Sc. Computer Science: *Federal University Lokoja, Kogi State (Distinction - 4.62/5.00)*

2014-2018

- Graduated in the top 1% of my department with distinction.
- Thesis: "Development of an Expert System for Eye Disease Diagnosis."

Last Updated: January 2024