

Ibrahima Barry

Data Scientist | iblouse49@gmail.com | [614-312-4440](tel:614-312-4440) | [LinkedIn](#) | [GitHub](#) | Brooklyn, New York

Skills

- Python | SQL | R | SAS | PySpark | Tableau | Excel | PowerBI | Data Storytelling | Data Modeling | Customer Segmentation | MLOps
- Statistical Analysis | Time Series Forecasting | Deep Learning | NLP | AWS | ETL | DBT | GenAI | Snowflake | Databricks | Optimization

Certifications

- AWS Certified Machine Learning | AWS Certified Cloud Practitioner | SAS Certified Clinical Trials Programmer | SAS Certified Specialist: Forecasting and Optimization | SAS Certified Specialist: Machine Learning | SAS Certified Base Programmer.

Experience

Analytics Engineer

USA for UNHCR

New York, NY 05/2022 - 01/2024

- Built a **gradient boosting classifier** in **Python** to predict donor likelihood, deployed using **Docker**, **MLflow**, and **AWS**, leading to a **20%** increase in end-of-year donations within two months.
- Developed an automated data pipeline using **AWS Glue** and **SQL** to centralize **Salesforce** and **S3 data** into **Redshift**, improving **data consistency** and **reducing manual** effort by **35%**.
- Analyzed the impact of city awareness campaigns using **SQL** for data aggregation, **Python** for statistical analysis, and **Tableau** for visualization, revealing that shifting 10% of the budget to digital advertising increased online donations by 25%.
- Automated donation approval monitoring with **Python**, **AWS SQS**, and **Docker**, triggering email alerts when approval rates dropped below 93%, saving the organization over **\$400,000 annually**.
- Developed an ensemble model combining **logistic regression**, **neural networks**, and **gradient boosting** in Python to **identify Ukraine war donors likely to give again**, resulting in a **15% increase** in donations within a month of implementation.
- Created a **Tableau dashboard** to give senior leadership insights into Ukraine war donors, supporting data-driven strategies for donor retention and future fundraising campaigns.
- Ranked potential donors by likelihood to give, using machine learning models and recommending that the fundraising team focus outreach on the top-scoring 75%, increasing engagement efficiency.

Data Science Fellow

Sharpest Minds

New York, NY 03/2021 - 03/2022

- Developed predictive models to assess Type 2 diabetes risk using CDC BRFSS data, aiding early diagnosis.
- Processed and cleaned datasets with over 400,000 rows and 275 columns, prioritizing sensitivity to achieve an 83.77% sensitivity rate with logistic regression.
- Identified 25 key predictors of Type 2 diabetes, including BMI, general health, and income level.

Data Analyst

Self-Employed

New York, NY 02/2013 - 02/2021

- Optimized inventory management by applying Economic Order Quantity (EOQ), ensuring fresh milk is reordered every three days reducing spoilage by 40%.
- Increased weekly avocado orders by 25% and adjusted deliveries to Thursday, resulting in a 12% sales boost and reduced stockouts, after identifying a 30% demand spike on Fridays and Saturdays.
- Forecasted peak winter jacket demand in mid-December using ARIMA, increasing stock before Black Friday, optimizing pricing, and reducing post-season orders, resulting in a 15% sales increase and 10% lower unsold stock.

Charity Analyst

Better Business Bureau

New York, NY 01/2012 - 10/2012

Projects

Diet Advisor App | [App](#) | Python, Generative AI, Streamlit

Developed a Streamlit application that analyzes meal images, calculates calorie content, and offers nutritional guidance using generative AI.

Mock-Interview App | [App](#) | Python, Generative AI, Streamlit

The application is an interactive Streamlit-based chatbot designed to simulate job interviews. Users provide their background details, including name, experience, and skills, and the chatbot dynamically generates interview questions based on the selected role and company. The chatbot conducts the interview and provides feedback with a score at the end.

Education

Master of Statistics & Applied Mathematics

CUNY Hunter College

New York, NY 01/2010 - 05/2012