

# JOSEPHINE AMPONSAH BAAH

DATA SCIENTIST

## CONTACT

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🌐 [Portfolio](#)  [Github](#)  [LinkedIn](#)

Skilled data scientist proficient in Python, SQL, PowerBI and Excel. Experienced with key skills such as data modelling and management, visualization, statistical analysis and machine learning and model deployment. Committed to leveraging data to drive business decisions and identify opportunities for exponential business growth.

## Experience

### LEAD DATA ANALYST

BROADSPECTRUM DIGITAL PAYMENTS

NOV 2022 - PRESENT

- Provided consultation to software team on algorithm for automated settlement and KPIs for product features.
- Derived market insights from data that drove growth in quality user experience and product refinement decisions with statistical models like A/B testing.
- Automated BI dashboards, reducing report building time by 70% with Power BI.
- Developed PRD, MRD, user guides and product documentations for products with Confluence (JIRA)
- Trained a team of 3 with data cleaning, visualization, statistical analysis and other requisite data analytics skills to independently and efficiently execute tasks.

### DATA ANALYST(OPERATION)

BROADSPECTRUM DIGITAL PAYMENTS

JAN 2022-OCT 2022

- Analyzed customer churn rates on application user data, which influenced product decisions and resulted in an average of 30% monthly user growth after 3 months.
- Analyzed transactions data to assess customer experience and detect product bugs with anomaly detection models.
- Derived KPI and implemented reporting measures accuracy and also speed anomaly detection in transaction trends.

## Projects

### SENTIMENTS-BASED RECOMMENDER [Code](#)

- Built aspect-based sentimental analysis model and clustered aspects with Word2vec on hotel reviews data, to generate sentiments of customers on specific parameters.

### INVENTORY DEMAND-PLANNING [Code](#)

- Built hierarchical time series forecast models to predict demand of goods to optimize operational costs of business.
- Built web application to run forecasting model and display data insights and deployed to Digital Ocean app platform

### INSTAGRAM-BOT DETECTOR [Code](#)

- Built a FastAPI application on a classification model to detect instagram accounts with abnormal activity (bots)

### TECHNICAL WRITING

- How to build APIs for machine learning applications with FastAPI. [Link](#)
- Use cases of hierarchical forecasting, methods of implementation and code example. [Link](#)
- Text data processing and word embedding techniques in Natural Language processing. [Link](#)

## Skills

**Expertise :** Supervised Learning, Unsupervised Learning, NLP, Forecasting, Statistical Analysis, Data Visualization, API Development, Recommender Systems, Version Control

**Frameworks/Tools** Pandas, Numpy, Matplotlib, Scikit-learn, Sktime, NLTK, Gensim, Transformers, FastAPI, Flask, Docker, PowerBI, MySQL, Excel

**Languages:** Python, SQL, HTML/CSS

## Education

**CERTIFIED AZURE DATA SCIENCE ASSOCIATE** SEPT 2023

**IBM DATA SCIENCE CERTIFICATION** JAN - MARCH 2023

- Data Science Methodology, Python for Data Science, AI & Development, Machine Learning with Python

**KWAME NKURUMAH UNI. OF SCIENCE & TECHNOLOGY**

BSc. Chemical Engineering SEP 2015 - JULY 2019