

## SUMMARY

Microsoft Certified: Azure Data Science Associate with a Master's degree in Data Science and working experience in the technology and business industry. Possess working knowledge of Python, RStudio, SQL (MySQL, SQLite & Big Query), Tableau, Microsoft, Power BI and TensorFlow. Leveraged advanced machine learning models and statistical techniques to enhance operational efficiency, improve model accuracy, and inform strategic decision-making. Up-and-coming tech blog writer on Medium, where I teach how to perform various data science tasks.

## SKILLS

- **Programming Languages:** Python (Scikit-learn, Pandas, NumPy, Matplotlib, Statsmodels, PyMC3, BeautifulSoup, Jupyter, NLTK), R
- **Analytical and Data Visualisation Tools:** Tableau, Microsoft Excel, SQL (MySQL, SQLite & Big Query)
- **Machine Learning & Deep Learning Frameworks:** Keras, TensorFlow
- **Econometrics & Statistical Modeling:** Causal Inference techniques, Demand Systems Modeling, Elasticity estimation
- **Experimental Design:** A/B testing, Design of Experiments (DOE), time series forecasting
- **Soft Skills:** Collaboration, Communication, Time Management, Agile Methodologies, Continuous Learning, Problem Solving

## CERTIFICATION AND TRAINING

### MICROSOFT CERTIFIED: AZURE DATA SCIENCE ASSOCIATE, MAY 2024

- Leverage Azure cloud technologies in scaling data science workflows, not limited to, building and deploying machine learning modules, managing data pipelines & conducting predictive analysis.

### ACCENTURE DATA ANALYTICS & VISUALISATION JOB SIMULATION, FEBRUARY 2024; Forage

- Cleaned, modeled, and analyzed seven datasets, each of 1,000 datapoints, to uncover content trends and inform strategic decisions, ensuring data integrity and accuracy.
- Prepared a detailed PowerPoint deck and an engaging video presentation to clearly communicate key insights and recommendations to both the client and internal stakeholders.
- Utilized advanced data visualization techniques (Matplotlib & Python) to create clear and compelling visual representations of data.

### BRITISH AIRWAYS DATA SCIENCE JOB SIMULATION, JANUARY 2024; Forage

- Analyzed airline customer reviews data using ethical web scraping techniques (python & BeautifulSoup) to gather comprehensive and representative datasets.
- Built a natural language processing (NLP) predictive model using python and NLTK to understand factors influencing customer buying behavior, identifying key determinants and trends.
- Generated actionable insights from customer reviews to inform British Airways' marketing and customer service strategies.

## WORK EXPERIENCE

FREELANCER.COM MAY 2023 – PRESENT

### **FREELANCE DATA SCIENTIST**

#### Responsibilities

- Gather, clean, and preprocess large datasets from various sources, ensuring data quality and consistency for analysis and model building.
- Conduct exploratory data analysis (EDA) using statistical methods to identify patterns, trends, and insights
- Build, test, and deploy machine learning models using techniques such as regression, classification, clustering, and natural language processing (NLP)
- Implement predictive models and algorithms to forecast business metrics and support decision-making
- Create clear and compelling data visualizations using tools like Tableau, Power BI, or Matplotlib to communicate findings to stakeholders effectively.
- Design and execute A/B tests to measure the impact of business changes and optimize strategies based on experimental results.
- Utilize big data tools and platforms such as Spark and Azure to process and analyze large datasets efficiently.
- Deploy models into cloud environments, monitor their performance, and make iterative improvements to ensure seamless integration and enhance accuracy
- Conduct causal inference analysis to measure the impact of marketing and operational changes on client business.

### Achievements

- Developed and deployed a time series forecasting model with Azure Machine Learning for an insect farming startup providing it with precise data-centric predictions for production sales over a 24 month horizon.
- Created an XGBoost ensemble machine learning algorithm with 83% accuracy to predict customer churn for a beauty and haircare business, allowing it to proactively address customer retention and refine its marketing strategies.

OUTLIER.AI SEPTEMBER 2024 – MARCH 2025

### **MACHINE LEARNING EXPERT**

#### Responsibilities

- Actively contributed to the development of Generative AI by ranking and reviewing prompt responses, enhancing model accuracy and relevance.
- Assessed AI-generated audio and text responses for language models, evaluating accuracy, functionality, and adherence to best practices to improve model performance and user experience.
- Provided detailed feedback on AI model outputs to drive continuous improvement

EL-PARAH CONSULT LIMITED APRIL 2019 – JANUARY 2020

### **PROJECT MANAGER**

#### Responsibilities

- Conducted ongoing analysis of market trends and competitor strategies to provide clients with a broader perspective and deeper context for research findings
- Managed project budgets effectively by monitoring expenses and optimizing resource allocation to meet financial goals.
- Worked closely with clients and cross-functional teams to understand research objectives, refine project scopes, and ensure alignment with business goals
- Developed comprehensive project plans, set timelines, and managed all phases of market research projects, from inception to final deliverables, ensuring timely and within-budget completion.
- Directed data collection activities and utilized SPSS to interpret findings, ensuring data accuracy and meaningful insights.

### Achievements

- Designed and implemented a workflow system that improved project turnaround times by 20%, enhancing efficiency and client satisfaction.

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## **PROJECTS AND RESEARCH**

OPTIVER STOCK PRICE PREDICTION COMPETITION, DECEMBER 2023; Freelance

- Competed in a high-profile Kaggle competition organized by Optiver, aimed at predicting closing price movements of stocks in NASDAQ for a chance to win a \$25,000 cash prize.
- Developed a Long Short-Term Memory (LSTM) deep learning algorithm tailored to predict stock price movements, leveraging time series data and complex neural network architectures.
- Conducted extensive data preprocessing to ensure the accuracy and quality of the input data, including handling missing values, normalization, and feature engineering.
- Trained and evaluated the LSTM model using historical stock price data, optimizing hyperparameters and employing regularization techniques to prevent overfitting and improve predictive performance.

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## **EDUCATION**

MSc DATA SCIENCE (ACHIEVED DISTINCTION), MARCH 2023; University of Essex, United Kingdom

- **Relevant Modules:** Applied Statistics, Modelling Experimental Data, Data Visualisation, Research Methods, Machine Learning, Neural Networks & Deep Learning, Combinatorial Optimisation

BSc BUSINESS ADMINISTRATION (ACHIEVED SECOND CLASS HONORS), JUNE 2017; Ashesi University, Ghana

- **Relevant Models:** Statistics, Microeconomics, Macroeconomics, Econometrics