

# Muhammad Zhafran Bahaman

Senior Data Analyst | Data Visualization Expert (Work Availability: Immediate)

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https://iamzhaf.github.io/My-Portfolio/

#### ABOUT ME

I am a self-starter with a passion for learning, and problem-solving and a strong desire to innovate and make a meaningful impact. I hold a Bachelor's Degree in Economics and Finance and have 6 years of experience in data analytics and risk analytics across FinTech, Banking, and Consulting industries. I bring expertise in Data Visualization, Al/ML, Python, SQL, Advanced Excel, and end-to-end dashboard development in both Tableau and PowerBI.

#### KEY COMPETENCIES AND TECHNICAL SKILLS

Econometrics | Risk Analytics | Machine Learning | GenAl | LangChain | OpenAl | Python | Flask | SQL | PySpark | Data Visualization | Dashboard Building | Tableau | Microsoft PowerBl | Plotly Dash | Web-based Dashboard Development | Data Modelling | Data Processing | Agile/Scrum | Data Management |

## **EDUCATION**

UNIVERSITY OF LONDON

Bachelor of Science (Honours) in Economics and Finance Class of 2017

**Achievements:** 

Conducted a Python and Machine Learning 101 class for data analytics club members.

## CERTIFICATION

- Data Engineering, Big Data, and Machine Learning on Google Cloud Platform, Google Cloud
- Neural Networks & Deep Learning By DeepLearning.Al
- The Path to Insights: Data Models and Pipelines (Google Analytics)
- Spark, Hadoop, and Snowflake for Data Engineering

### ENTREPRENEURIAL PROJECT/EXPERIENCE

### Founder & Al Application Developer - Finwise-moneyme Budget App

Oct 2024 - Present

- Position: Founder / Developer
- Key Achievements:
  - Conceptualized and developed an Al-powered personal finance management web app during my career downtime (unemployment) to empower users in tracking expenses, managing budgets and gaining insights into spending habits effectively and intelligently.
  - **Built the prototype version of the app using Python** (Flask) for backend development, Python (Dash) for the front-end dashboard and PostgreSQL for robust data management.
  - Integrated Generative AI with prompt engineering to automate receipt data extraction reducing manual input time by up to 85% and enabling fixed/variable expense categorization within ~15 seconds per receipt.
  - o Demonstrated entrepreneurial skills by identifying market gaps, developing the product independently using Agile methodology, and planning for scalability.

## WORKING EXPERIENCE

<u>DBS - Singapore</u> <u>Apr 2024 - Oct 2024</u>

- Position: Data Steward / Data Governance Analyst (Agency Contractor under Adecco)
- Kev Achievements:
  - Automated DQ Profiling with Python/PySpark: Developed Data Quality (DQ) Profiling Python Program using OOP, and automated its execution using Cloudera Job Pipeline, eliminating manual processes, resulting in an 80% improvement in reporting turnaround time.
  - **Metadata Management in Collibra:** Ensured the accuracy of business metadata in DBS's Data Catalog platform, Collibra, and upheld high standards for data management practices.

#### Standard Chartered Bank - Singapore

Feb 2023 - Dec 2023

- Position: AVP, Data Analyst (Direct Contractor); Manager, Portfolio Manager/Bureau Data
- . Key Achievements:
  - Dashboard Development and LIBOR Transition: Developed PowerBI and Excel dashboards for LIBOR transition, providing senior managers with actionable insights to identify risks and demonstrated knowledge of financial markets products.
  - Data Processing and Compliance for Regulatory Reporting: Used Python for data cleaning and processing, ensuring compliance with IBOR reporting requirements and building ETL pipelines for dashboards and reports.

### Mar 2022 - Feb 2023

#### Maybank (Malayan Banking) - Singapore

- Position: Junior Data Scientist, Retail Credit Risk Intelligence Team, Maybank's Group Risk (Full-time)
- Key Achievements:
  - Credit Portfolio Dashboard Development: Led in developing Maybank's PowerBI Portfolio Risk Dashboards for Risk Managers and Product Heads. Delivered crucial credit risk insights to CROs and Retail Product Heads. Streamlined risk reporting processes by reducing manual effort by 60%. Demonstrated expertise in data modelling, data visualization, and knowledge of credit risk analytics and metrics such as PD, LGD, EL, NPL, and Recovery Ratio.
  - **ETL Pipeline Development:** Engineered ETL data pipelines for the Portfolio risk dashboard, and crafted data extraction and processing scripts using SAS, SQL and Python.
  - o **Credit Risk Model Evaluation:** Reviewed existing credit scoring models to evaluate performance and identify predictive variables that could enhance the accuracy and effectiveness of new models using machine learning algorithms.

# <u>Validus Capital - Singapore</u> <u>Mar 2020 - Mar 2022</u>

- Position: Data Scientist II (Full-Time)
- Key Achievements:
  - Web-based Dashboard Development: Co-developed a Plotly Dash web-based dashboard for the Credit/Collections team, contributing to the company's success in winning the 2020 Global FinTech MAS Innovation Challenge.
  - **Automated Financial Calculation using Python:** Developed a Python script to automate ROI calculation using the IRR methodology and NPL percentage, replacing the existing manual Excel process.
  - Machine Learning for Automated Credit Decision Engine: Collaborated with cross-functional teams to design and build an automated credit decision engine using machine learning models (using Scikit-Learn), and leveraging alternative data sources to predict credit defaults.
  - **Customer Segmentation with RFM Analysis:** Conducted RFM (Recency, Frequency, Monetary) analysis to segment customers into tiers, providing insights that informed targeted marketing/sales strategies.

KPMG Singapore Feb 2019 - Mar 2020

- Position: Management Consultant/Data Analyst, Data Analytics Team, KPMG Advisory Division (Full-time)
- Key Achievements:
  - Leveraged cutting-edge data analytics solutions for effective asset management: Co-developed Tableau dashboard for SMRT, and empowered the organization with a data-driven tool for effective asset assessment management.
  - **AML Monitoring and DQ Python Program:** Developed a Python-based AML monitoring and Data Quality Check program, improving banking transaction data quality checks and anomaly detection for the Monetary Authority of Singapore.