

OVERVIEW

Dedicated and results-driven aspiring Data Scientist experienced in conducting desktop research, data collection, analysis, and visualization techniques. I possess a strong analytical mindset and a passion for leveraging data to drive strategic decision-making. Adept at utilizing various tools and programming languages, I am committed to delivering data-driven solutions that enhance business performance. I am seeking an opportunity to apply my expertise in IT consulting to make a meaningful impact.

PROFESSIONAL EXPERIENCE

PricewaterhouseCoopers (PwC) Malaysia

Sep 2022 - Present

Associate Financial Risk Management

Financial Risk & Regulation

- Reviewed the design of machine learning-based credit models, tailored for local digital banks.
- Conducted independent end-to-end assessments of credit risk management practices to ensure compliance with local regulatory standards. This process encompassed conducting interviews with senior-level management.

Modelling

- Advised audit function in assessing model methodologies for expected credit loss models, ensuring compliance with MFRS 9 standards.
- Automated model validation process using VBA for corporate clients, which reduced the time taken from 2 hours to under 30 minutes.
- Coordinated knowledge transfer sessions with clients from non-technical background, addressing data assessment requirements, data scope, sources, and the integration of domain knowledge into the credit modelling process.

Treasury

- Conducted valuations of financial products including forwards, options, swaps and structured products.

Internal Projects

- Developed a Gradient Boosted Decision Tree (GBDT) machine learning model using Python, utilizing LightGBM and XGBoost libraries for addressing classification problems.
- Conducted Extract, Transfer and Load (ETL) process i.e., extracting data from internal database, transforming it for model compatibility, and loading it as input for model development.
- Conducted backtesting of the model's performance using Out-of-Time (OOT) data to assess its predictive accuracy and robustness in anticipating future, unseen data.

INDIVIDUAL PROJECTS

Deep Learning: Artificial Neural Networks | C++

Dec 2021

- Developed a neural network for binary classification, implementing stochastic gradient descent and backpropagation in the learning process. This project involved handling two sets of data, each comprising 1000 inputs.

Data Analysis: Analyzing historical and implied volatility of Apple stock price | C++

Oct 2021

- Conducted an in-depth analysis of both historical and implied volatility in Apple stock prices. This included measuring the observed volatility in historical option prices and comparing it to implied volatility predictions using the Black-Scholes equation, gaining insights into market dynamics.

EDUCATION

The University of Manchester

Sep 2019 - Jun 2022

Bachelor of Science (Hons.) in Mathematics and Statistics

- Graduated with First Class Honours.
- Relevant Courses: Multivariate Statistics and Machine Learning, Scientific Computing, Generalised Linear Models.
- Capstone Project: Variable Selection Methods in Regression Analysis using R (89%).

MARA College Banting

Jul 2017 - May 2019

- Achieved a total score of 42/45 points.

PROFESSIONAL DEVELOPMENT & CERTIFICATIONS

Microsoft Azure Fundamentals	<i>Ongoing</i>
Stanford CS230 Deep Learning by Andrew Ng, YouTube	<i>Ongoing</i>
Hugging Face NLP Course	<i>Ongoing</i>
Stanford CS229 Machine Learning by Andrew Ng, YouTube	<i>Aug 2023</i>
Introduction to Data Science in Python, Coursera	<i>Apr 2023</i>
Applied Machine Learning in Python, Coursera	<i>Feb 2023</i>
SQL for Data Science, Coursera	<i>Oct 2020</i>
Python for Data Science and Machine Learning Bootcamp, Udemy	<i>Aug 2020</i>
KPMG Data Analytics Consulting Virtual Experience Program, Forage	<i>Aug 2020</i>

TECHNICAL PROFICIENCIES

Programming Languages:	Python, R, SQL, C++, MATLAB
Data Pipeline:	Alteryx, KNIME
Data Visualisation Tools:	Tableau, Power BI
Databases:	SQL (e.g., MySQL)
Cloud Platform:	Microsoft Azure

ADDITIONAL INFORMATION

Languages: Malay (Native), English (Proficient), Mandarin (Beginner)