# Tay Xun Yang

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#### **EDUCATION**

**National University of Singapore** 

Singapore

Bachelor of Science in Business Analytics (Hons)

Aug 2020 – July 2023

**Ngee Ann Polytechnic** 

Singapore

Diploma in Information Technology, Business & Data Analytics Specialization

Apr 2015 - May 2018

### **EXPERIENCE**

## **Ministry of Finance**

**Singapore** 

Security & Resilience Intern

Nov 2022 – Dec 2022

- Use Tableau to perform descriptive analysis on Singapore Government ICT expenditure to understand trends and relationships within the data, and to identify opportunities for cost savings and efficiency improvements
- Extract data from multiple sources, transform it into a consistent format and load it into a central repository for analysis and reporting.

## **PSA Corporation Limited**

Singapore

Data Analyst Intern

May 2022 - Oct 2022

- Use machine learning and natural language processing (NLP) techniques with Python to forecast SQL query resource
  usage and optimize server performance. This involves predictive training models on historical data and using NLP to
  process and analyse SQL query logs.
- Design and develop a Python-based auto-recovery program that automatically detects and rectifies job scheduling failures in real time. The program will use rule-based algorithms to identify the root cause of failures and take corrective action, ensuring that jobs are completed successfully.
- Use statistical techniques and machine learning methods, such as clustering and outlier detection, to identify anomalies in our dataset. This will involve training predictive models on historical data and using them to detect unusual patterns in new data

Motorist PTE LTD Singapore

Business Analyst Intern

May 2021 – Oct 2021

- Build a VAR model to capture the dynamic relationship between COE and resale car value in Singapore.
- Develop a web scraping script using Beautiful Soup and Selenium to extract data from automotive websites
- Build an ETL pipeline using Python and Google Cloud technologies to process datasets in batch mode.

## **PSA Corporation Limited**

Singapore

Data Analyst Intern

Mar 2017 - Aug 2017

- Conduct interviews with key stakeholders to gather user requirements for the data quality assurance project. The
  interviews focus on identifying the needs and expectations of users, business objectives and constraints that need to be
  considered in the design and implementation of the project.
- Develop a Python script that performs data validation on the daily incoming files. The script will use statistical techniques to detect and correct errors and inconsistencies in the data, ensuring that it is accurate and consistent before it is loaded into the database.
- Build and maintain PowerBI dashboards to provide real-time visibility into key business metrics & KPI

#### **SKILLS**

**Languages:** English and Mandarin (Spoken and Written)

Data Visualization Software: Tableau, Qlik Sense, D3.js, Google Data Studio, PowerBI,

Tools: Airflow, Git, Docker, Jira

**Technical Skills:** Time Series Analysis, NLP, Machine Learning, Deep Learning, Data Scraping

**Programming Skills:** 

- Python (NumPy, Pandas, Scikit-learn, Tensorflow, Matplotlib, BeautifulSoup, Selenium)
- SQL (MySQL, SQL Server, Google Bigguery, MongoDB)
- Others (R, JavaScript, Java, C#)

## **PROJECTS**

#### **Instagram Influencer Analysis** | Python

Dec 2021

- Scrape Instagram influencer posts with Selenium and build features from the textual data
- Train a Machine Learning Model to classify posts as sponsored or not sponsored post

#### **CERTIFICATIONS**

**Certificates:** Deep Learning Specialization, Monetary Policy Analysis and Forecasting, Social media Analysis using R, Government Finance Statistics, Financial Market Analysis