# Yit Wey Tam

A driven aerospace engineering graduate with a strong foundation in data science seeking opportunities in the data industry with the goal of leveraging technical skills honed through years of academic and practical experience to drive impactful outcomes and contribute to the growth and success of an organisation.

## RELEVANT PROJECTS

Modelling Airbnb Listings

- Performed data cleaning on an Airbnb dataset using Pandas.
- Perform feature selection to understand the effects of different features on the target column.
- Trained, compared and evaluated machine learning models (Random Forest, Linear/Logistic Regression, XGBoost etc).
- Perform hyperparameter tuning and cross validation to optimise the results for particular metrics.

Data Collection Pipeline

- Developed an application that scrapes both image and tabular data from websites and stores the data locally in .json files. Implemented testing to ensure scrapers functionality.
- Containerised the scraper in a Docker image making it easy deployable.
- Developed a CI/CD pipeline using GitHub actions to ensure the docker image was updated on DockerHub on push.

Gas Turbine Gas Path Diagnostics Using Artificial Neural Networks

- Developed a Trent-900 like engine model to generate training, testing and validation engine measurement samples.
- Perform data cleaning and transformation on the generated engine measurements datasets.
- Developed a nested neural network using Keras and Scikit-learn library in Python to predict engine health status and degradation level.
- Optimised the networks' hyperparameters using various search techniques such as Bayesian Optimisation and Grid Search.
- Developed a graphical user interface for user-friendliness.

## EDUCATION

**AiCore** November 2022 - February 2023
Data Science Trainee

**Cranfield University** September 2021 - August 2022
Masters of Science, Thermal Power specialising in Aerospace Propulsion
Thesis title: Gas turbine gas path diagnostics using Artificial Neural Networks
Grade: Merit

**Coventry University** September 2016 - August 2019
Bachelors of Engineering, Aerospace Systems Engineering
Dissertation title - Real Time Control Demonstrator Using Arduino.
Group Project - Design and manufacture a UAV with accordance to BMFA requirements.
Grade: Upper Second Class

## CONTACT


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- github.com/TyW-98


## SKILLS

**Programming Languages**
- Python
- Matlab
- HTML
- CSS

***Tools and Frameworks:***
- Numpy
- Pandas
- Matplotlib
- Seaborn
- Plotly
- Selenium
- BeautifulSoup
- PyTorch
- Keras
- Scikit-learn
- TensorBoard
- Jupyter Notebooks
- Bootstrap
- Git
- Docker
- Github Actions

## OTHER

**Language**
- English
- Malay
- Mandarin

Membership
- Member of Royal Aerospace Society (RAEs)

## Current Studies

- JavaScript
- SQL (PostgreSQL)