

## CONTACT

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## BIOGRAPHY

A proficient Data Scientist with demonstrable expertise in Python, SQL, and AWS.

Skilled in developing innovative machine learning solutions using Python packages such as TensorFlow, statsmodels, and scikit-learn.

Demonstrated leadership in interdisciplinary teams and effective collaboration on industry projects. Excellent communication skills developed through client-facing roles and tutoring

Comprehensive academic background in Data Science and Engineering.

Recognised for being a self-starter and fast learner, consistently adapting to new challenges and rapidly acquiring new skills to drive success in diverse environments.

## COMPETENCES

### Computing

• AWS • SQL • Python  
• scikit-learn • TensorFlow  
• Keras • statsmodels  
• Pandas • NumPy • Tableau  
• Power BI • GitHub  
• MATLAB • LaTeX

### Languages

• Native English  
• Conversational Cantonese  
• Conversational Spanish

# Trihao Van

## EXPERIENCE

### Structures Engineer | BAE Systems

November 2020 – August 2022

- Independently developed a neural network to predict structural fatigue using Python and TensorFlow.
- Built an SQL database and migrated aircraft data from legacy Excel solution to improve organisation
- Successfully achieved a twenty-fold reduction in lead times by developing digital toolsets and machine learning models to automate complex tasks.
- Optimised maintenance cycles by analysing aircraft log data and presented findings using Tableau.
- Liaised with a worldwide customer base to manage a global fleet of Typhoon aircraft.
- Led onboarding and comprehensive training for three new team members, fostering seamless integration and sustained professional growth.

### Mathematics Tutor | Tutorful

November 2019 – November 2020

- Successfully enhanced the mathematical competencies of five students ranging from Key Stage 2 to A-Level, demonstrating advanced communication and time management skills. As a testament to this achievement, all students attained grades between 9-7 in their GCSE and between A\* - B in A-Levels.

### Acoustics Consultant | Hawkins & Associates

April 2019 – September 2019

- Automated calculations and data processing using MATLAB, reducing process times by 50%.
- Liaised between contractors and clients at all stages of the construction process to ensure adherence to noise regulations and guarantee comfortable acoustics on completion.

### Assistant Manager | Kim Lien Mini Market, Chau Enterprise

June 2018 – April 2019

- Gained an insight into the complexities of running a business and developed my ability to work under pressure in a customer facing role and in a fast-paced environment during busy periods.

## EDUCATION

### BrainStation | Data Science Diploma

August 2022 – November 2022

- Developed an in-depth knowledge of Data Science topics including statistics, machine learning techniques, and cloud computing.
- Acquired comprehensive knowledge and proficiency in the AWS ecosystem, encompassing services such as EC2, S3, and SageMaker.
- Built Machine Learning models capable of time-series forecasting, clustering, classification, and recommendation using Python packages including statsmodels, scikit-learn and TensorFlow
- Capstone Project - *Power to The People: Analysing and Predicting Household Power Consumption*
  - Built time series machine learning models in Python to forecast power consumption. Achieved prediction errors as low as 3.5%.

### The University of Sheffield | MEng, Aerospace Engineering

October 2014 – June 2018

- Upper 2<sup>nd</sup> Class Honours
- Recipient of Study Abroad Scholarship
- Final Year Project - *Development of Hydrogen Assisted Combustion Devices*
  - Simulated the combustion of hydrogen enriched fuel mixtures using computational fluid dynamics to determine the increase in fuel efficiency gained from hydrogen assisted combustion.

## PROJECTS

### Data Scientist | Industry Hackathon

October 2022 | BrainStation

- Collaborated with web developers and UX designers to conceive and prototype an app within 24 hours aimed at improving energy sustainability.
- Carried out exploratory data analyses on energy and greenhouse gas emissions data to inform project decisions.

### Project Manager | Industrial Training Programme

September 2017 – February 2018 | Siemens/The University of Sheffield

- Led an interdisciplinary team of engineering students to design a gas turbine emissions probe to improve flow characteristics and sample representation.