

# ZHEN YANG SOH

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## Education

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### **Aerospace Engineering (MEng) | University Of Bristol** **2017-2021**

- 4<sup>th</sup> Year: First Class Honours (72%)
- 3<sup>rd</sup> Year: First Class Honours (72%)
- 2<sup>nd</sup> Year: First Class Honours (75%)
- 1<sup>st</sup> Year: First Class Honours (73%)

### **Canadian International Matriculation Program | Sunway College** **2016**

- Ontario Scholar Award: Overall Grade above 90%

### **Ontario Secondary School | Sunway International School (SIS)** **2011-2015**

- Completed 40 hours of community volunteering
- High Distinction (90+%) in Physics, Mathematics, Chemistry, Biology, English, and Business

## Work Experience

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### **Data Analyst Intern | YNY Technology Sdn Bhd | Shah Alam** **Oct-Dec 2021**

- Created SSRS data reports using SQL queries based on client's requirements
- Enhanced client's database in SSMS to include history tables and triggers (SQL)
- Wrote a user guide for a web-based lab digitization API
- Learned basic server, database administration, C#, website hosting (IIS, SSL), CMMS

## Projects

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### **Sports Hypothesis Testing Project (Python)** **2022**

- Imported messy csv data into DataFrames and performed data cleansing using regex and string manipulation
- Grouped sports teams by cities by merging DataFrames and aggregating their populations
- Tested for correlation using aggregated data

### **Satellite Group Design Project** **2020-2021**

- Worked in a multi-disciplinary team of 8 to design an Earth Observation satellite based on requirements from Airbus Defence & Space
- Researched and conducted trade-offs for launch vehicle selection
- Tracked requirements and analyzed its implications on design
- Selected and compared data handling units in compliance with communications sub team
- Estimated the cost of the satellite using a parametric cost model
- Presented final design review in front of Airbus Defense and Space Representatives

## Composite Optimization of Payload Fairing

2019-2020

- Performed image binarization and interpolation of the Ariane 6 payload fairing using MATLAB
- Coupled MATLAB input file scripting to Finite Element Analysis in ABAQUS successfully
- Calculated effective properties of composite structures using homogenization models

## Aerodynamics Feature Design Project

2020

- Plotted the feature design space to select thrust and wing loading combinations for aircraft design
- Ran a simulation to size and optimize the tailplane of an aircraft based on stability constraints

## Certificates & Online Courses

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**Introduction to Data Science in Python** | University of Michigan

March 2022

**Applied Plotting, Charting & Data Representation in Python** | University of Michigan

May 2022

**Applied Machine Learning in Python** | University of Michigan

May 2022

## Skills

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**Data Analytics Related** MS SQL, Python, Pandas, Numpy, Regex, SSRS (Intermediate)

**Programming** Python, MATLAB (Intermediate), C / C++ / Arduino (Fundamentals)

**Microsoft Office** Word, Excel, Powerpoint (Advanced)

**Language** English (Native), Mandarin (Fluent), Bahasa Malaysia (Conversational)

## Extra-Curricular Activities

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**University Of Bristol Malaysian and Singaporean Association**

2018

- Lead a group of freshers in an introductory camp with the purpose of preparing them for university

**International History Bee & Bowl**

2014-2015

- Represented SIS in an international history / general knowledge trivia competition
- Worked in a group of 8 to research and prepare for the competition
- Specialized in scientific breakthroughs and technological advancements

**State Chinese Chess Competitions**

2007-2010

- Won third place in a state level Chinese Chess Competition and competed regularly for 3 years

## Interests

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Badminton, Filmmaking / Video Editing, and Chess.

*References Available upon Request*