# Joshua Yong

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# **EDUCATION**

BEng Materials Science and Engineering @ Imperial College London (London, UK)

Oct 2020 - Jun 2023

- Expected Grade: First Class
- Coursework: Python, Machine Learning, Data Analysis, Probability and Statistics, Multivariable Calculus
- Clubs and Societies: IC Sinfonietta (Secretary), IC Symphony Orchestra, IC Singapore Society

#### Singapore-Cambridge 'A' Level @ Raffles Institution (Singapore)

Jan 2012 - Nov 2017

- 88.75/90 Rank Points (H2 in Physics, Chemistry, Mathematics, Music)
- Distinction in H3 Pharmaceutical Chemistry

#### WORKING EXPERIENCE

#### Software Development Summer Intern @ Ghyston (Bristol, UK)

Jul 2022 – Aug 2022 (8-Week Programme)

- Excelled in 2-week training programme for C#, JavaScript, TypeScript, React and web application development
- Completed support tickets for both internal and external client-facing projects far ahead of deadlines
- Worked on projects with a variety of tech stacks and frameworks (Python, C#, React.ts, Postgres, MSQL)
- Implemented web-app feature to save client company >60h of manual work per week

## Sea Security Team Commander @ Republic of Singapore Navy (Singapore)

Mar 2019 - Nov 2019

- Conducted >30 armed boarding operations to deter terrorism and piracy
- Managed the training and operational standards of the operations team as a 2<sup>nd</sup> Lieutenant (Officer)

# **VOLUNTEERING**

#### Head, Branding & Marketing @ Orchestra of the Music Makers (Singapore)

Feb 2020 - Jun 2021

- Oversaw and directed a publicity team to promote 4-5 concerts yearly
- Managed a variety of content delivery platforms, including Facebook, YouTube and Squarespace
- Increased the average weekly social media reach from <500 to >7000 in 1 year

# **PROJECTS**

# Materials Computing Challenge @ Imperial College London

Nov 2020 (Y1), Jun 2022 (Y2)

- Y1: Led a team of 4 to create a Monte Carlo simulation of RAFT polymerisation using a Gillespie algorithm
- Y2: Created a machine learning pipeline to predict perovskite crystal structures using scikit-learn
- Analysed the predictivity of the pipeline with varying classifiers and parameters

# Global Challenge Lab @ Imperial Enterprise Lab & Tsinghua x-lab

Jul 2021

- Led group discussions to create a start-up idea to tackle the UN's Sustainable Development Goals
- Contributed to the idea generation, user interface design and pitch content
- Awarded the Track Winner prize having the best pitch video in our category (https://youtu.be/u5Bcaq4\_JV8)

## Engineering Design Study @ Imperial College London

Jan 2021 – Jun 2021

- Led an electronics subgroup to design a viscometer from scratch in a team of 12 undergraduates
- Designed the electronic circuit, Arduino code and the functional principles of the final product

# **SKILLS**

- Full Stack Developer: Python, C++, C#, JavaScript, TypeScript, SQL, HTML, CSS
  - o Frameworks/Platforms: React, Flask, Postgres, Microsoft SQL, Docker
- Other Hard Skills: Machine Learning, Algorithm Design, Microsoft Office, Adobe Design Suite, Squarespace
- Soft Skills: Problem Solving, Teamwork, Communication, Organisational Skills, Leadership
- Languages: English (Native), Mandarin (Limited working proficiency), Japanese (Beginner)