

Ruby Ng

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EDUCATION

Imperial College London

BEng Materials Science and Engineering

London, UK

Oct 2020 – Jun 2023

- Grade expected: First Class | Dean's List

- Coursework: Python, Data Analysis, Probability & Statistics, Multivariable Calculus, Managerial Economics

Macau Anglican College

Macau, CN

High School Diploma

Sep 2014 – Jun 2020

- Grade achieved: 95.1% | Rank: 1

- A-levels: 4 A* in Mathematics, Physics, Chemistry and Biology

PROFESSIONAL EXPERIENCE

Barclays Execution Services (BX) – Group Technology Service Management

Knutsford, UK

Technology Analyst – Summer Intern

Jun 2022 – Aug 2022

- Conducted stakeholder-engaged research to create, and present to senior management, a future vision for the Global Command Centre aimed to improve team cohesion across different locations and hence performance.
- Developed innovative strategies to improve critical application/service monitoring and incident management capabilities, and to boost workplace efficiency with a focus on UI/UX optimisation and mobile app integration.
- Built and reviewed AppDynamics/ThousandEyes/Sprinklr dashboards to achieve end-to-end visibility of key services such as Barclays Partner Finance and Barclays iPortal, and to analyse brand sentiment in real time.

Private Employer

Remote Work

Korean-English/Korean-Mandarin Translator – Freelancer

Apr 2021 – Ongoing

- Delivered daily translations of 2.2k+ top-trending forum posts, news articles, variety shows, interviews and other visual media for a K-entertainment blog in an accurate, timely manner, with a cumulative total of ~268k views to date.

PROJECTS

Team Computational Challenge | Imperial College London

Dec 2020 & Jun 2022

- Programmed a Monte Carlo simulation of RAFT polymerisation based on the Gillespie algorithm using Python.
- Developed and refined a supervised classification machine learning model using Python to identify crystal structures.
 - Performed nested cross validation for hyperparameter tuning and model selection.
 - Analysed the predictivity of classifiers via interactive visualisation plots.

Student Shapers Project - 'Re:Fresher' Web App | Imperial College London

Jan 2022 – Jun 2022

- Co-creator of a web app aimed to help freshers refresh their A-level knowledge as well as support weaker students.
- Designed creative, interactive educational content for the Chemistry & Physics syllabi to meet multiple learning styles.
- Contributed to the ideation and prototype stage of the web app's UI/UX design using Microsoft Power Apps.

Global Challenge Lab | Imperial Enterprise Lab & Tsinghua x-lab

Jul 2021

- Finalist of the 10-day global entrepreneurial hackathon featuring 700+ students from top-ranking universities.
- Winning team in the 'Mental Health & Non-Communicable Diseases' category with the best [start-up idea pitch](#).
- Aided in the ideation, market research and mobile app UI design to tackle UN's SDG 3: Good Health & Wellbeing.

Engineering Design Study – Viscometer Fabrication | Imperial College London

Jan 2021 – Jun 2021

- Deputy Chief Engineer in a team of 12 coordinating touchscreen GUI development and Arduino programming.

HONORS & AWARDS

- Academic (20+): Outstanding Cambridge Learner Awards – Top in the World for Mathematics, Henry Fok Foundation Scholarship, MSAR Government Awards (Overall, Chinese, Portuguese), Principal Honour Rolls, etc.
- Sports (20+): MSAR Honorific Title of Merit for representing the Macau Diving Team in regional/international competitions – the 8th Asian Age Group Swimming Championships (Bangkok), the Pacific School Games (Adelaide), the Singapore National Diving Championships, the Malaysia Diving Invitational, etc.

SKILLS & INTERESTS

- Technical Skills: MS Office (Word, Excel, PowerPoint), Adobe InDesign, Python, SQL
- Languages: Cantonese, Mandarin, English (Native), Korean (Advanced – TOPIK 6), Japanese (AS-level equivalent)
- Interests: Language-learning, photography, travel, sports