

MADELINE LUI

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SUMMARY

I'm a first class honours graduate, skilled in coding, statistical analyses and data visualisation. I possess strong written and verbal communication skills, with a self-driven mindset.

SKILLS

Programming languages: Python, MATLAB, R, SQL.

EXPERIENCE

Personal Project

Solar Power Generation Analysis | *Python* 2024

- **Predictive modelling:** Time-series forecast of PV panel power generation over the next 7 days, from a PV dataset in India over 35 days.
- **Performance analysis:** Identified a 97% conversion efficiency and 12% performance ratio in PV systems to deliver data-driven recommendations on equipment maintenance.

Muckli Lab, University of Glasgow

2023—2024

Undergraduate Research Assistant | *Python, MATLAB, R*

- **Programming:** Developed an interactive user interface using Python and automated detection of images containing object occlusions on a dataset of >200k images.
- **Statistical computing:** Delivered experimental results to bridge research gap by performing multivariate pattern analysis and bootstrap simulations on 7-T fMRI data using MATLAB.
- **Data preprocessing:** 4+ years and 1+ years of data wrangling in R and Python.

EDUCATION

University of Glasgow (First Class Honours)

2020 — 2024

BSc (Hons) Psychology with Neuroscience Specialism

United World College Li Po Chun, Hong Kong

International Baccalaureate Diploma Programme

ADDITIONAL TRAINING

MIT Open Course Ware

2024

Mathematics module: Differential Equations

Imperial College London

2022

Mathematics modules: Linear Algebra, Multivariate Calculus.

AWARDS

BPS Conference Award

2024

Communication skills: Dissertation research awarded Best Presentation in Cognition and Perception at the annual undergraduate conference hosted by the British Psychological Society.

VOLUNTEERING

Children's Ministry Hong Kong and Scotland

2019 — 2023

- **Leadership:** Led Sunday church programs for children ages 5-12 and weekly meetings with over 10 volunteers.
- **Adaptability:** Successfully managed last-minute challenges, including stepping-in to lead a team of 4 volunteers and >30 children, and implementing conflict resolution strategies, resulting in an 80% increase in team efficiency during high-pressure situations.
- **Planning skills:** Coordinated 1 annual curriculum and delegated responsibilities to a cross-functional team of 6.

LANGUAGES

English and Cantonese
French

Native/bilingual
Full professional proficiency