Sydney, Australia • joshxpli@gmail.com • +61435048188 • Australian Citizen

#### Education

#### UNIVERSITY OF NEW SOUTH WALES

Sydney, Australia

Bachelor of Science (Honors) Class 2A, Major in Applied Mathematics, GPA: 77/100

May 2021

Relevant Coursework: Mathematical Modeling, Data Mining, Optimization, Object Oriented Programming, Algorithms, Software Engineering Fundamentals, Statistical Inference, Oceans and Climate Dynamics.

#### CLIMATE CHANGE RESEARCH CENTER

Sydney, Australia

Honours Student Researcher

March 2020 – Present

Recipient of Australian Research Council, Center of Excellence for Climate Extremes Honours Scholarship Project: Investigation into the Co-evolution of Moisture and Precipitation in Global Climate Models.

- Developed process oriented diagnostic tools for data from various global climate models.
- Utilized diagnostic tools to investigate an attractor behavior found in space of moisture-precipitation.

#### GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, Georgia

Study abroad coursework in Mathematics, GPA: 3.5/4.0

August – December 2019

WESLEY COLLEGE
Top 1% of West Australian Class of 2016, School Mock Trials & Debate Team
December 2016

### **Professional Experience**

KALO INC.

Data Scientist Intern

New York City, New York

January 2020 – February 2020

- Created text and image based machine learning models to categorize the fashion styles of all of clothes in Kalo's database (over 10,000 items) with an accuracy of over 70%.
- Utilized Python, Keras, sci-kit learn and pandas to analyze data and build machine learning models.

## GEORGIA INSTITUTE OF TECHNOLOGY - SCHOOL OF MATHEMATICS

Atlanta, Georgia

Research Assistant

August 2019 – December 2019

- Adapted a new partial differential equation fitting algorithm IDENT, to be able to work on adaptive grid sizes rather than just on uniform grid sizes.
- Tested for stability, efficiency, and then identified strengths and weaknesses of the algorithm.
- Built with Matlab using numerical mathematical tools including Lasso and high resolution schemes.

## CHINESE ACADEMY OF SCIENCES – INSTITUTE OF AUTOMATION

Beijing, China

Data Scientist Intern

December 2017 – February 2018

- Collected key shareholder data of over 5000 public companies with automated scraping of news sites.
- Analyzed and visualized data in R to find similarities between various investment firms' portfolios.

#### **Public Service & Leadership Experience**

# UNIVERSITY OF NEW SOUTH WALES PHILANTHROPY

Sydney, Australia

Fundraiser

February – December 2017

- Raised \$50,000 for the Sydney Children's Hospital with a dedicated team during the academic year.
- Conceptualized and materialized community engaging events to attract donations.

## **Skills & Interests**

Programming: Python, MATLAB, Git, Linux, Windows.

Language: English (native), Mandarin (native speaking, intermediate writing), French (intermediate).

**Interests:** Green technology, entrepreneurship, history, guitar, traveled extensively in USA, Europe and Asia.