

Josh X. Li

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Education

UNIVERSITY OF SAN FRANCISCO

Masters of Science, Major in Computer Science. GPA: 4.0/4.0

Recipient of USF MSCS Merit Scholarship.

San Francisco, CA

August, 2021 – May, 2023

UNIVERSITY OF NEW SOUTH WALES

Bachelor of Science (Honors), Major in Applied Mathematics

Recipient of Australian Research Council, Center of Excellence for Climate Extremes Honors Scholarship.

Sydney, Australia

February, 2017 – May, 2021

Professional Experience

KALO INC.

Machine Learning Engineer Intern

Sydney, Australia

January 2020 – February 2020

- Created text based supervised machine learning models with *Keras* and *Sci-Kit Learn* to categorize the fashion styles of all clothing items in Kalo's database (over 10,000) with an accuracy of over 60%.
- Abstracted and quantified the qualitative problem of recognizing fashion styles.
- Cleaned and sorted the training data for preprocessing with *Pandas*.

CHINESE ACADEMY OF SCIENCES – INSTITUTE OF AUTOMATION

Data Scientist Intern

Beijing, China

December, 2017 – February, 2018

- Collected major shareholder data of over 5000 public companies through automated scraping of news sites.
- Analyzed and visualized data to find similarities between various investment firms' portfolios.
- Utilized *Beautifulsoup* and *Scrapy* for the scraping and *Pandas* for pre and post processing.

Academic Experience

UNIVERSITY OF NEW SOUTH WALES – CLIMATE CHANGE RESEARCH CENTER

Research Assistant

Sydney, Australia

May 2020 – August 2021

- Designed and conducted a year long research project investigating the interaction between moisture and convection.
- Developed process oriented diagnostic tools for data from various global climate models with *Numpy* and *XArray*.
- Utilized diagnostic tools to investigate an attractor behavior found in space of moisture-precipitation.

GEORGIA INSTITUTE OF TECHNOLOGY – SCHOOL OF MATHEMATICS

Research Assistant

Atlanta, GA

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 in *Matlab*.
- Improved the algorithm by an exponential amount given the exponentially greater amount of use cases of all 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.

Side Projects

Reddit GUI

October 2021 – December 2021

- Developed a new GUI for Reddit.com with a completely new user experience *D3* in *JavaScript*.
- Applied the principles of data visualization to create a new way of browsing.

Event Ticketing Website

November 2021 – December 2021

- Created an online ticketing platform for a project at USF using *Java*, *Jetty* and *HTML*.

Skills & Interests

Programming Languages: Python, Java, JavaScript, C, HTML, SQL.

Technologies: Pandas, Numpy, Sci-Kit Learn, Keras, D3, Git, Mac, Linux, Windows.

Languages: English (Native), Mandarin (Native), French (Intermediate).

Interests: Guitar, Martial Arts (Judo, Kickboxing), Traveling/Backpacking (40 countries).