



# Aojie (Jay) Li

Aojie has strong interpersonal skills demonstrated through working independently and collaboratively in teams. With strong leadership and execution with experience in deep research of mathematical modelling and data analysis, Aojie is interested in working in pension plans, risk modelling and financial analysis.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2023 - 2024

BSc (Honours)  
Mathematics & Statistics  
[Specialization in Statistics]  
Minor Economics  
McMaster University  
2023

## SKILLS

Technical: Python; R Studio; MATLAB;  
AXIS; AWA Machine Learning;  
Microsoft 365

## PROFESSIONAL CERTIFICATES/AWARDS

Python for Everybody; Python Data Structure - University of Michigan: 2022

Python & Statistics for Financial Analysts - Hong Kong University of Science & Technology: 2022

Financial Market - Yale University: 2022

## INTERESTS/ACTIVITIES

Basketball; Volleyball

## EXPERIENCE

*Project: 5-year horizon analysis for a new insurance product from AIC* Jun. 2023-Aug. 2023

University of Toronto

- Calculated expense augmented premiums
- Provided the predicted monthly benefit reserves for the company through recursive formula
- Created a profit analysis through simulation under new mortality assumption at portfolio level for the first five years
- Carried out a mean-variance optimization analysis & an efficient frontier plot through python

*Project: Hungary Chickenpox Cases Time Series Analysis* Feb. 2022-Apr. 2022  
McMaster University, Hamilton

- Compared to the datasets. Confirmed that Budapest's data is representative & selected it as the analysis subject
- Analyzed the ACF & PACF plot & hypothesized the model of either AR or ARMA
- Observed with ADF test, confirmed the model is ARIMA (2,3), & did the parameter estimation
- Draw Residual VS Time, QQ plot, and Residual ACF images to verify the correctness of the Box Test

CITIC Prudential Life Insurance, Nanjing, China  
Finance Intern May 2021-Sep. 2021

- Created spreadsheets using Microsoft Excel for periodic reporting
- Developed & analyzed budgets, performing financial statement analysis
- Tested budget system & conducted research & analysis on the cost control system