

Danyang Dai

MASTER STUDENT OF APPLIED ECONOMETRICS

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👤 Econometrics Graduate Profile

I'm a Master of Applied Econometrics graduate from University of Melbourne with strong skills in statistical and mathematical modelling, data visualization, time series forecasting and data process with large dataset. Proficient in statistical programming languages. Completed university research projects using R, Matlab, Stata and Python. Passionate about quantitative analysis and coding in R. Member of R Ladies Melbourne Organisation Committee and enjoy sharing experience and helping others in R programming.

⚙️ Skills

R:

- Completing Master's research thesis in Spillover and Forecast Variance Decomposition Analysis.
- Estimates predictive models in frequentist and Bayesian approach coded up in R.
- Processing large dataset such as hourly financial data using tidyverse and dplyr.
- Generates re-producible data analysis reports with data visualization in R Markdown: [R Markdown - A Better Way of Communicating with Data](#).
- Implementing complex algorithms including MCMC.
- Website Development using Blogdown: [Equity Research Association](#) and [Personal Website](#)

Stata:

- Undertake deep-dive analysis in large survey dataset such as Current Population Survey and National Longitudinal Survey
- Regression analysis with large survey data and provide insights with statistical modelling.

🎓 Education

Master of Applied Econometrics - WAM 80

UNIVERSITY OF MELBOURNE

Parkville, VIC

2019-2020 Dec

- Applying and critically evaluating the use of statistical models for forecasting and decision making options.

Bachelor of Commerce (Accounting and Finance)

MONASH UNIVERSITY

Clayton, VIC

2015-2018

- Major: Accounting and Finance

🔍 Teaching Assistant

Teaching Assistant - Data visualisation and analytics

MONASH UNIVERSITY

Online

2021 Jan -2021 Feb

- Teach students about basic R language and visualisation using ggplot includes Box-and-whisker plots, Mosaics, Rotatable 3D scatter plots, Heat maps, Motion charts, cluster and association charts.
- Helps students understand models such as linear regression models, classification and regression trees, and random forests.
- Marking assignments and answering students' question during consultations.

👤 Leadership - Volunteer

Co-founder

EQUITY RESEARCH ASSOCIATION

The University of Melbourne

2020 Jan - Present

- Further developed teamwork skill through facilitating the application process and getting approval to establish this student organisation
- Leadership demonstrated through the management of the operation including club development and growth
- Organisation of recruitment and successfully attracted over 100 candidates
- Websites development through R using Blogdown

Operation manager

AIESEC MONASH

Monash University

2017 Mar - 2018 Feb

- Overseeing operation consultants' performance by supervising members daily activities and their KPI fulfilment.
- Improving financial performance of the local communities through cost control and maintaining sustainability of the communities.
- Communication skills demonstrated through explaining products to students and maintaining client relationship and negotiating solutions to avoid conflicts with clients.
- **Achievement:** Awarded leadership activator in 2017 for leading a team of 5 members and maintaining overall 85% KPI achievement of finance portfolio. Leadership developed through coaching and mentoring members to develop their potential and facilitate members learning process.

🏢 Professional Experience

Organisation Committee member - volunteer

RLADIES MELBOURNE

Melbourne

2020 March - Present

- Public Workshop: [R Markdown - A Better Way of Communicating with Data](#)
- In charge of the Github account and maintaining repositories
- Promoting events and facilitating events

Internship at Asset Management Centre

CITIC-PRUDENTIAL LIFE INSURANCE COMPANY LTD

Beijing

2018 July - 2018 Sep

- Analysis of Money Market Funds and Dividend Collection.
- Participated in Asset Valuation Training Held by EY. Gained the Valuation Methods for different type of Investment Assets Under IFRS
- Performance monthly review of Fund Account Balance

Summer Internship in Investment Banking Division

CHINA SECURITIES CO.LTD.

Beijing

2015 Dec - 2016 Jan

- Participated in the Material Asset Restructurings for Telling Telecommunication Pty Ltd
- Equity research skills developed through researching for asset restructuring.

✂️ Project

UBS

UBS INVESTMENT BANKING CHALLENGE CAMPUS HEATS

Monash University

2017 Apr

- Acquisition of Asciano case study
- Critical evaluation of financial situations developed by the valuation of Asciano using both Market capitalization and Enterprise value methods
- Analytical and problem solving skills developed through bid strategies analysis