Yangzhuoran Fin Yang

PhD Student in Statistics

Monash University, Australia

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Education

Doctor of Philosophy in Statistics — *Clayton, Australia*

Monash University — *Apr. 2020 - Present*

- Supervisors: Professor Rob J Hyndman, Professor George Athanasopoulos, Associate Professor Anastasios Panagiotelis
- Thesis: Component-based Approach in Multivariate and Hierarchical Forecasting
- Expected July 2024 (Intermission from May 2021 to Feb 2022 due to COVID-19)

Bachelor of Commerce (Hons) in Econometrics — *Clayton, Australia*

Monash University — *Mar. 2019 - Dec. 2019*

- Optimal portfolio selection via dimensional reduction in a stochastic optimal control setting
- GPA: 3.875; GRADE H1

Bachelor of Actuarial Science — *Clayton, Australia*

Monash University — *Jul. 2016 - Oct. 2018*

- GPA: 4; WAM: 90.323

Experience

Teaching Associate — *Clayton, Australia*

Monash University — *2017, 2019 - 2020, 2022 - Present*

- Actuarial Science, Econometrics and Business Analytics

Applied Economist — *Beijing, China*

Huohua Siwei — *Apr. 2021 - Jan. 2022*

- Experimental design and evaluation, data mining and R web app development

Adjunct Lecturer — *Suzhou, China*

Monash University — *Oct. 2020 - Jun. 2021*

- Suzhou Industrial Park Monash Research Institute of Science and Techology

Visiting Student — *Shanghai, China*

ShanghaiTech University SIST — *Dec. 2019 - Aug. 2020*

- Supervisor: Assistant Professor Ziping Zhao

Research Assistant — *Clayton, Australia*

Monash University — *Sep. 2017 - Aug. 2020*

- Developments of R packages and data wrangling
- Supervisors: Assoc Professor Bonsoo Koo, Assoc Professor Dan Zhu, and Professor Rob Hyndman

Teaching

Applied Forecasting [Graduate and undergraduate level] — *Sem 1 2022, Sem 1 2023*

Highest student satisfaction band; One of the top performing units in the Student Evaluation

Principles of Econometrics [Graduate and undergraduate level] — *Sem 2 2023*

Highest student satisfaction band

Advanced Statistical Modelling [Graduate and undergraduate level] — *Sem 2 2022, Sem 1 2023*

Highest student satisfaction band

Business Statistics [Graduate and undergraduate level] — *NOV12 2020, Sem 1 2021*

Highest student satisfaction band; One of the top performing units in the Student Evaluation

Business and Economic Statistics [Undergraduate level] — *Sem 1 2019, Sem 2 2019*

Job Market Paper

"Free Lunch Multivariate Forecasting: reducing forecast variance using linear combinations" by Yangzhuoran Fin Yang, Rob J. Hyndman, George Athanasopoulos and Anastasios Panagiotelis

Abstract:

Publication

Yang, Y. F., and Zhao, Z. (2020), "Online Robust Reduced-Rank Regression," in 2020 IEEE 11th Sensor Array and Multichannel Signal Processing Workshop (SAM), pp. 1–5.

Working papers

1. "Nonlinear Dynamics of Kimchi Premium" by Bonsoo Koo, Myung Hwan Seo and Yangzhuoran Fin Yang (Administrative revision)
2. "Forecast Multivariate Time Series using Lower Dimensional Components" by Yangzhuoran Fin Yang, Rob J. Hyndman, George Athanasopoulos and Anastasios Panagiotelis
3. "ycevo: An R Package for Yield Curve Nonparametric Estimation" jointly with Nico Purnomo, Wenying Yao and Bonsoo Koo
4. "Free Lunch Forecast Projection in Hierarchical Forecast Reconciliation"
5. "Forecasting Multiple Time Series with One-Sided Dynamic Autoregressive Principal Components: A hybrid of Dynamic Factor Model and Vector Autoregression"

Professional activities

Conferences

Jun. 2023 **43rd International Symposium on Forecasting** — *Charlottesville, USA*
`https://github.com/FinYang/talk.ComponentsForecast`

Dec. 2020 **Doctoral Research Colloquium, Monash Business School** — *Virtual*
`https://yangzhuoranyang.com/talk/colloquium2020/`

Jun. 2020 **11th IEEE Sensor Array and Multichannel Signal Processing Workshop** — *Virtual*
`https://yangzhuoranyang.com/talk/orrrr/`

Review activities

European Journal of Operational Research — *Since 2023*
Economic Modelling — *Since 2021*

Awards

- 2020 Monash Business School Co-funded Graduate Research Scholarship
- 2020 Monash Graduate Scholarship
- 2020 IEEE Sensor Array and Multichannel Signal Processing Workshop Best Student Paper Award Finalist
- 2019 Monash Business School Dean's Honour
- 2019 Monash University Econometrics Honours Memorial Scholarship
- 2018 Monash Business School Prize for the Top Achieving Student in Actuarial Science (Undergraduate)
- 2018 Monash University Medal for Undergraduate Academic Excellence
- 2018 Monash Business School Dean's Honour
- 2018 Monash Business School Student Excellence Award in recognition of exceptional academic excellence (Business analytics, Modelling in finance and insurance, Applied forecasting for business and economics)
- 2018 The International Institute of Forecasters Student Forecasting Award offered by Monash University Applied Forecasting for Business and Economics
- 2017 Monash Business School Student Excellence Award in recognition of exceptional academic excellence (Statistical Thinking, Principles of Econometrics, Contingencies in insurance and pensions)

Softwares

1. Hyndman, R. J., Akram, M., Bergmeir, C., & O'Hara-Wild, M. (2018). *Mcomp: Data from the m-competitions* (Version 2.8) [Computer software]. `https://CRAN.R-project.org/package=Mcomp`
2. Yang, Y. F., & Zhao, Z. (2020). *RRRR: Online robust reduced-rank regression estimation* (Version 1.1.0) [Computer software]. `https://CRAN.R-project.org/package=RRRR`
3. Hyndman, R. J., & Yang, Y. F. (2019). *compenginets: Time series from http://www.comp-engine.org/timeseries/* (Version 0.1) [Computer software]. `https://github.com/robjhyndman/compenginets`
4. Hyndman, R. J. (2019). *demography: Forecasting mortality, fertility, migration and population data* (Version 1.22) [Computer software]. `https://CRAN.R-project.org/package=demography`
5. Yang, Y. F. (2020). *lazybar: Progress bar with remaining time forecast method* (Version 0.1.0) [Computer software]. `https://CRAN.R-project.org/package=lazybar`
6. Yang, Y. F. (2024). *lazyparser: Command line r-flavored argument parser*. `https://github.com/FinYang/lazyparser`
7. Yang, Y. F. (2020). *lazytype: Functions and addins to save keystrokes and clicks* (Version 0.0.0.9000) [Computer software]. `https://pkg.yangzhuoranyang.com/lazytype/`
8. O'Hara-Wild, M., & Yang, Y. F. (2024). *roam: Remote objects with active-binding magic*.
9. Hyndman, R. J. (2018). *tscompdata: Time series data from various forecasting competitions* (Version 0.0.1) [Computer software]. `https://github.com/robjhyndman/tscompdata`
10. Hyndman, R. J., & Yang, Y. F. (2020). *tsdl: Time series data library* (Version 0.1.0) [Computer software]. `https://finyang.github.io/tsdl/`
11. Hyndman, R. J., Kang, Y., Montero-Manso, P., Talagala, T., Wang, E., Yang, Y. F., O'Hara-Wild, M., Taieb, S. B., Hanqing, C., Lake, D. K., Laptev, N., & Moorman, J. R. (2020). *tsfeatures: Time series feature extraction* (Version 1.0.2) [Computer software]. `https://CRAN.R-project.org/package=tsfeatures`
12. Koo, B., Tomasetti, N., Goh, K.-Y., & Yang, Y. F. (2022). *ycevo: Nonparametric estimation of the yield curve evolution* (Version 0.1.2) [Computer software]. `https://CRAN.R-project.org/package=ycevo`

Referees

Professor Rob J Hyndman — *Monash University*

DEPARTMENT OF ECONOMETRICS & BUSINESS STATISTICS — *Clayton, Australia*

- Email: Rob.Hyndman@monash.edu

Professor George Athanasopoulos — *Monash University*

DEPARTMENT OF ECONOMETRICS & BUSINESS STATISTICS — *Clayton, Australia*

- Email: George.Athanasopoulos@monash.edu

Associate Professor Anastasios Panagiotelis — *University of Sydney Business School*

DISCIPLINE OF BUSINESS ANALYTICS — *Darlington, Australia*

- Email: anastasios.panagiotelis@sydney.edu.au