Ryan Thompson

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Interests

High-dimensional statistics, time series forecasting, mathematical optimisation

Education

PhD in Econometrics and Business Statistics, Monash University	2019–pres.
BCom (Hons) in Business Analytics, University of Sydney	2016
BCom in Econometrics and Finance, University of Sydney	2013–2015

Research

Preprints

Thompson, R. and Vahid, F. (2021). 'Group selection and shrinkage with application to sparse semiparametric modeling'. arXiv: 2105.12081.

Thompson, R. (2020). 'Robust subset selection'. arXiv: 2005.08217.

Refereed publications

Matsypura, D., Thompson, R., and Vasnev, A. L. (2018). 'Optimal selection of expert forecasts with integer programming'. *Omega* 78, pp. 165–175.

Non-refereed publications

Thompson, R. (2020). 'Forecasting in the world of big data'. *ORMS Tomorrow* Spring/Summer 2020, pp. 20–21.

Software

`R` package `grpsel`: Subset selection for generalised linear models with grouped predictors, available on CRAN and GitHub

`R` package `robustsubsets`: Subset selection for linear models with corrupted data, available on GitHub

`R` package `familial`: Hypothesis testing for families of population parameters, available on GitHub

Presentations

'Group selection and shrinkage with application to sparse semiparametric modeling', Joint Statistical Meetings 2021, contributed talk — Aug 2021

'Robust subset selection', Australian and New Zealand Statistical Conference 2021, contributed talk — Jul 2021

Awards, scholarships, and prizes

Monash Business School Dean's Excellence Award	Feb 2019–pres.
Australian Government Research Training Program Scholarship	Feb 2019–pres.
Monash Business School Student Excellence Award	Apr 2020
University of Sydney Academic Merit Prize	May 2017

Teaching assistant

Principles of econometrics (ETC3400, ETC5340), Monash University	Sem 2 2021
Applied forecasting (ETC3550, ETC5550), Monash University	Sem 1 2021
Statistical thinking (ETC2420, ETC5242), Monash University	Sem 2 2020
Applied forecasting (ETC3550, ETC5550), Monash University	Sem 1 2020
Statistical thinking (ETC2420, ETC5242), Monash University	Sem 2 2019
Business forecasting (ETF3231, ETF5231), Monash University	Sem 1 2019
Quantitative business analysis (BUSS1020), University of Sydney	Sem 2 2016
Quantitative business analysis (BUSS1020), University of Sydney	Sem 1 2016

Industry experience

Senior Consultant in Actuarial & Financial Risk, KPMG Australia	Oct 2018–Feb 2019
Consultant in Actuarial & Financial Risk, KPMG Australia	Feb 2017–Sep 2018

Professional service

Reviewer for Omega
External thesis examiner for University of Sydney

Affiliations

American Statistical Association, Member
Institute of Mathematical Statistics, Member
International Institute of Forecasters, Member
Statistical Society of Australia, Member

References

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