

Matthew Thirkettle

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EDUCATION

Ph.D. Economics, Cornell University (Expected)	2020
M.A. Economics, Cornell University	2017
BSc(Hons) Mathematics and Economics (<i>First Class Honors</i>), The University of Canterbury	2013
BSc Mathematics and Economics, The University of Canterbury	2012
Non-degree (reciprocal exchange program), The University of California at Berkeley	2012

FIELDS

Econometrics, Networks, Industrial Organization

RESEARCH EXPERIENCE

Graduate Research Assistant Francesca Molinari, Cornell University	2016-2017, Fall 2018, Spring 2019
Graduate Research Assistant Jörg Stoye, Cornell University	2015-2016, Fall 2017, Spring 2019
Graduate Research Assistant Levon Barseghyan, Cornell University	Summer 2019
Research Intern Sida Peng, Office of the Chief Economist, Microsoft Research	Summer 2018
Research Analyst Motu Economic and Public Policy Research	2013-2014

TEACHING EXPERIENCE

Teaching Assistant, ECON4220, Financial Economics Gregory Besharov, Cornell University	Fall 2019, Spring 2020
Teaching Assistant, ECON3140, Econometrics Francesca Molinari, Cornell University, (Evaluation: 4.83/5)	Spring 2018
Teaching Assistant, ECON208, Intermediate Microeconomics II Philip Gunby, The University of Canterbury	Fall 2013
Teaching Assistant, ECON207, Intermediate Microeconomics I Steve Agnew, The University of Canterbury	Spring 2013

RESEARCH

Abstracts on page 3 below.

Job Market Paper

“Identification and Estimation of Network Statistics with Missing Link Data”, November 2019.

[Latest version](#)

Working Papers

“Discrete Choice under Risk with Limited Consideration”, with Levon Barseghyan and Francesca Molinari, February 2019. **R&R at American Economic Review**.

[arXiv: 1902.06629](#)

“Calibrated Projection in MATLAB: Users’ Manual”, with Hiroaki Kaido, Francesca Molinari, Jörg Stoye, October 2017.

[arXiv: 1710.09707](#)

Works in Progress

“Estimating Peer Effects with a Dynamic Mismeasured Network”.

“Effort Provision in a Social Coding Platform: Evidence from GitHub and StackOverflow Linked Data”, with Levon Barseghyan, Francesca Molinari, and Sida Peng.

“Selecting In and Out of Private Healthcare with Public Provision: Evidence from Health Insurance Choice”, with Esteban Méndez and Jason Somerville.

AWARDS AND SCHOLARSHIPS

The Howard and Abby Milstein Graduate Teaching Assistantship	2020
The Ernest Liu Family Outstanding Teaching Award	2018
L.R. “Red” Wilson MA ‘67 Excellence in Economics Medal	2016
Tapan Mitra Economics Prize	2016
Cornell University Sage Fellowship	2014
Golden Key International Honor Society	2013
The University of Canterbury Mathematics Scholarship	2011 and 2012
The University of Canterbury Mobility Scholarship	2012
The University of Canterbury College of Science Dean’s Congratulations	2011, 2012, and 2013

PROFESSIONAL SERVICE

Referee Services: *Quantitative Economics*

Mentor, Cornell University, Economics Graduate Student Mentorship Program 2016-2020

PROFESSIONAL ASSOCIATIONS

American Economic Association, Econometric Society

OTHER

Programming: MatLab, R, Stata, SQL \LaTeX .

Citizenship: New Zealand Citizen and USA Lawful Permanent Resident

REFERENCES

Dissertation Committee

Francesca Molinari (Committee Chair)
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Henry Scarborough Professor of Social Science
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450 Uris Hall
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RESEARCH ABSTRACTS

Job Market Paper

Identification and Estimation of Network Statistics with Missing Link Data

I obtain informative bounds on network statistics in a partially observed network whose formation I explicitly model. Partially observed networks are commonplace due to, for example, partial sampling or incomplete responses in surveys. Network statistics (e.g., centrality measures) are not point identified when the network is partially observed. Worst-case bounds on network statistics can be obtained by letting all missing links take values zero and one. I dramatically improve on the worst-case bounds by specifying a structural model for network formation. An important feature of the model is that I allow for positive externalities in the network-formation process. The network-formation model and network statistics are set identified due to multiplicity of equilibria. I provide a computationally tractable outer approximation of the joint identified region for preferences determining network-formation processes and network statistics. In a simulation study on Katz-Bonacich centrality, I find that worst-case bounds that do not use the network formation model are 44 times wider than the bounds I obtain from my procedure.

Working Papers

Discrete Choice under Risk with Limited Consideration, with Levon Barseghyan and Francesca Molinari, February 2019. **R&R at American Economic Review.**

This paper is concerned with learning decision makers' (DMs) preferences using data on observed choices from a finite set of risky alternatives with monetary outcomes. We propose a discrete choice model with unobserved heterogeneity in consideration sets (the collection of alternatives considered by DMs) and unobserved heterogeneity in standard risk aversion. In this framework, stochastic choice is driven both by different rankings of alternatives induced by unobserved heterogeneity in risk preferences and by different sets of alternatives considered. We obtain sufficient conditions for semi-nonparametric point identification of both the distribution of unobserved heterogeneity in preferences and the distribution of consideration sets. Our method yields an estimator that is easy to compute and that can be used in markets with a large number of alternatives. We apply our method to a dataset on property insurance purchases. We find that although households are on average strongly risk averse, they consider lower coverages more frequently than higher coverages. Finally, we estimate the monetary losses associated with limited consideration in our application.

Calibrated Projection in MATLAB: Users' Manual, with Hiroaki Kaido, Francesca Molinari, Jörg Stoye

We present the calibrated-projection MATLAB package implementing the method to construct confidence intervals proposed by Kaido, Molinari and Stoye (2019). This manual provides details on how to use the package for inference on projections of partially identified parameters. It also explains how to use the MATLAB functions we developed to compute confidence intervals on solutions of nonlinear optimization problems with estimated constraints.