## **Brett Mullins**

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Information Chicago, IL, 60654 brettcmullins@gmail.com

RESEARCH INTERESTS Topological Learning Theory, Causal Discovery, and Applied Econometrics

Additional Interests

History and Foundations of Probability and Statistics, Computable Analysis, Formal

Epistemology, Income Mobility

**EDUCATION** 

Miami University, Oxford, OH

M.S., Applied Mathematics, Expected: Spring 2018

Comprehensive Exams: Statistical Theory

Thesis: Formal Learning Results on Admissible Representations

Advisor: Paul Larson, Department of Mathematics

Carnegie Mellon University, Pittsburgh, PA

Summer School in Logic and Formal Epistemology June 2015

Georgia State University, Atlanta, GA

B.S., Economics, May 2014 B.A., Philosophy, May 2014

Summa Cum Laude

Thesis: Against Indifference: Popper's Assumption of Distribution Preference

Advisor: Yongsheng Xu, Department of Economics

Teaching Instructor of Record (Miami University)

Finite Mathematical Models Spring 2016
Precalculus Fall 2015, Fall 2016

Teaching Assistant (Miami University)

Great Theorems of Mathematics Spring 2016

Professional Experience Data Scientist

Summer 2016, February 2017 to Present

Data, Discovery, and Decision Science, Allstate, Chicago, IL

Support projects such as QuickFoto Claims, total loss modeling, and allocating rental vehicle time with predictive modeling, real-time production implementation, and randomized field trials. Co-developed a framework to support renewal underwriting decisions for auto policies using flexible mixed-integer programming techniques.

Research Affiliate

January 2014 to Present

Fiscal Research Center, Georgia State University, Atlanta, GA

Member of a group investigating earnings mobility among low income individuals in Georgia. We build econometric models and develop new methods of mobility measurement using government administrative data from the Department of Human Services (DHS) and the Department of Labor (DOL).

Research Assistant

May 2013 to August 2013

Department of Economics, Georgia State University, Atlanta, GA

Advisor: Jim Marton

Estimated disenrollment likelihoods and tested for interaction effects given various demographic and health characteristics within Georgia's PeachCare for Kids program.

## **Publications**

- "Gauthier, Equilibrium, and the Emergence of Morality." Dialogue, vol. 55 (4), 2016.
- "Long Run Earnings Mobility among Low Income Individuals" with Mark Rider, David Sjoquist, and Sally Wallace. *Journal of Economics and Public Finance*. vol. 2, 154-170, 2016.
- "Trends in TANF and SNAP Participation in Georgia" with Mark Rider, David Sjoquist, and Sally Wallace. Andrew Young School of Policy Studies, Fiscal Research Center Report, 2015.
- 4. "Recollection and Second Order Skepticism." Marist Undergraduate Philosophy Journal, 2015.

## SELECTED PRESENTATIONS

"Measuring the Impact of Social Programs on Income Mobility Using Big Data." Next Generation of Public Finance Conference, May 2016

"Non-Arbitrary Inference: An Objection to Strong Bayesianism." Indiana Philosophical Association Fall Meeting, November 2015

"Mathematics Preparation & Intermediate Economics." Miami University Graduate Research Forum, October 2015

"Total Earnings Mobility among Public Assistance Recipients in Georgia." Missouri Valley Economic Association Annual Meeting, October 2015

"On Probability Assessment in the Original Position"

Formal Ethics 2015, July 2015

The Pittsburgh Area Philosophy Colloquium, September 2014

"Helping Hand or Anchor: The Effect of Public Assistance on Income Mobility among the Poor."

National Tax Association's Annual Conference on Taxation, November 2014

"The Effect of Mathematics Courses on Outcomes in Undergraduate Intermediate Economics: New Evidence."

Missouri Valley Economic Association Annual Meeting, October 2014

## ACADEMIC HONORS

Top Three Presentation Award, MU Graduate Forum December 2015 Research Excellence in Economics Program  $(Re^2P)$  Sept. 2013 to Dec. 2014 Graduate Student Paper Award, Indiana Philosophical Association October 2014 Phi Sigma Tau Scholar Travel Stipend March 2014, September 2014 George W. Beiswanger Award: Outstanding Student in Philosophy,

Department of Philosophy, Georgia State University

February 2014

Socrates Award: Outstanding Student in Philosophy,

Department of History & Philosophy, University of North Georgia April 2012

Tools & Languages

R, Python, LaTeX, Groovy, SAS, reveal.js, Elastic Stack, Keras, Tensorflow, Agile/Scrum, German (Elementary)

Professional Memberships American Mathematical Society American Philosophical Association

Phi Sigma Tau (Honors Society in Philosophy)

Missouri Valley Economic Association