# David Puelz

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## Academic Experience

The University of Chicago — 2018 - present
Booth School of Business, Econometrics and Statistics
Postdoctoral Scholar
Interests: *causal inference, randomizations, networks, machine learning, applications of statistics*

The University of Texas at Austin — 2013 - 2018
McCombs School of Business, Statistics Group
Graduate Research Assistant

Wesleyan University — 2009 - 2011
Mathematics and Physics Departments
Teaching Assistant

The University of California, Los Angeles — Summer 2010
Institute for Pure and Applied Math
Researcher

Max Planck Institute, Göttingen, Germany — Summer 2009
Dynamics and Self-organization
Researcher

## Education

**The University of Texas at Austin** — 2018
McCombs School of Business, Statistics Group
Ph.D., Statistics
Topics: *causal inference, Bayesian modeling, applications of statistics*

**The University of Texas at Austin** — 2015
McCombs School of Business, Statistics Group
M.S., Statistics

**Wesleyan University** — 2011
Honors in Mathematics, Phi Beta Kappa
B.A., Mathematics and Physics

## Publications

*Fisher meets BART: Integrating Causal Machine Learning and Randomization Tests*
David Puelz and Panos Toulis
In preparation (2020)

*Estimating Displacement Effects of a Hot Spot Policing Intervention in Medellín, Colombia*
Guillaume Basse, Avi Feller, Donald Green, David Puelz, and Panos Toulis
In preparation (2020)

*A Symmetric Prior for Multinomial Probit Models*
Lane Burgette, David Puelz, and P. Richard Hahn
Submitted (2020)
[arXiv:1912.10334]

*Monotonic Effects of Characteristics on Returns*
Jared Fisher, David Puelz, and Carlos Carvalho
Revision (2020)
[SSRN:3212934]

*A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference*
David Puelz, Panos Toulis, Guillaume Basse, and Avi Feller
Submitted (2019)
[arXiv:1910.10862]

*Financial Literacy and Economic Outcomes*
David Puelz and Robert Puelz
Submitted (2019)
[SSRN:3302978]

*Portfolio Selection for Individual Passive Investing*
David Puelz, P. Richard Hahn, and Carlos Carvalho
Applied Stochastic Models in Business and Industry (2019)
[SSRN:2995484]

*Regularization and Confounding in Linear Regression for Treatment Effect Estimation*
P. Richard Hahn, Carlos Carvalho, David Puelz, and Jingyu He
Bayesian Analysis 13 (2018). No 1
[link to journal]

*Variable Selection in Seemingly Unrelated Regressions with Random Predictors*
David Puelz, P. Richard Hahn, and Carlos M. Carvalho
Bayesian Analysis 12 (2017). No 4
[link to journal]

*Optimal ETF Selection for Passive Investing*
David Puelz, P. Richard Hahn, and Carlos Carvalho
Working paper
[arXiv:1510.03385]

## Presentations

A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference
Design and Analysis of Experiments — University of Tennessee, Knoxville
Knoxville, TN — October 2019

A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference
Advances with Field Experiments — University of Chicago
Chicago, IL — September 2019

A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference (Poster)
*Best Poster prize winner
Society for Political Methodology Annual Meeting — MIT
Cambridge, MA — July 2019

Monotonic Effects of Characteristics on Returns
Eastern Asia ISBA Conference — Kobe University
Kobe, JP — July 2019

A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference
Economics Workshop — Keio University
Tokyo, JP — July 2019

Monotonic Effects of Characteristics on Returns
Seminar on Bayesian Inference in Econometrics and Statistics — Brown University
Providence, RI — May 2019

Randomization Tests of Causal Effects Under General Interference
Atlantic Causal Inference Conference — McGill University
Montreal, CA — May 2019

Randomization Tests of Causal Effects Under General Interference
international conference on design of experiments — University of Memphis
Memphis, TN — May 2019

Randomization Tests of Causal Effects Under General Interference
Chicago Booth Econometrics and Statistics Seminar
Chicago, IL — February 2019

Monotonic Effects of Characteristics on Returns
Chicago Booth Research Workshop
Chicago, IL — December 2018

Utility-based Feature Selection for Econometrics
International Society for Bayesian Analysis World Meeting
Edinburgh, UK — June 2018

Posterior Summarization
University of Notre Dame Mendoza School of Business
South Bend, IN — November 2017

Utility-based Feature Selection for Finance and Econometrics
IROM PhD Seminar. University of Texas.
Austin, TX — November 2017

Regret-based Selection
Informs Annual Meeting
Houston, TX — October 2017

Sparse Dynamic Portfolio Selection
Joint Statistical Meetings
Baltimore, MD — August 2017

Sparse Dynamic Portfolio Selection
Informs Advances in Decision Analysis
Austin, TX — June 2017

Regret-based Selection
Seminar on Bayesian Inference in Econometrics and Statistics — Washington University
St. Louis, MO — May 2017

Penalized Utility Estimators in Finance
IROM Department Symposium. University of Texas
Austin, TX — February 2017

Posterior Summarization in Finance
IROM PhD Seminar. University of Texas
Austin, TX — November 2016

Sparse Mean-Variance Portfolios
Joint Statistical Meetings
Chicago, IL — August 2016

Penalized Utility Estimators in Finance
International Society for Bayesian Analysis World Meeting
Sardinia, Italy — June 2016

Penalized Utility Estimators in Finance
Seminar on Bayesian Inference in Econometrics and Statistics — University of Pennsylvania
Philadelphia, PA — April 2016

Sparse ETF Investing
IROM PhD Seminar. University of Texas
Austin, TX — March 2016

Penalized Utility Estimators in Finance
Goldman Sachs & Co
New York City, NY — February 2016

The ETF Tangency Portfolio
Seminar on Bayesian Inference in Econometrics and Statistics — Washington University
St. Louis, MO — May 2015

## Honors

Graduate Continuing Fellowship
University of Texas Graduate School — 2017 - 2018

Professional Development Award
University of Texas McCombs School of Business — 2015 - 2016

Dean's Fellowship
University of Texas McCombs School of Business — 2013 - 2018

Bonham Fellowship
University of Texas McCombs School of Business — 2014

Jastrow Fellowship
University of Texas McCombs School of Business — 2013

Rae Shortt Prize (excellence in mathematics)
Wesleyan University — 2010

Robertson Prize (outstanding sophomore in mathematics)
Wesleyan University — 2009

## Service

Referee For: Annals of Applied Statistics, Journal of Business and Economic Statistics, Neural Computing and Applications.

## Employment

i-360, LLC — 2018 - present
Data Science Team
Part-time Econometric Consulting

Goldman Sachs & Co. — 2011 - 2012
Investment Management Division
Analyst

(updated March 4, 2020)