David Puelz

Experience

The University of Chicago

2018 - present

Booth School of Business, Econometrics and Statistics

Principal Researcher

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

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 (2021)

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 (2021)

A Symmetric Prior for Multinomial Probit Models Lane Burgette, David Puelz, and P. Richard Hahn Bayesian Analysis (2021) [link to journal]

Monotonic Effects of Characteristics on Returns Jared Fisher, David Puelz, and Carlos Carvalho Annals of Applied Statistics (2020) [link to journal] A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference David Puelz, Panos Toulis, Guillaume Basse, and Avi Feller In revision at the Journal of the Royal Statistical Society, Series B (2020) [arXiv:1910.10862]

Financial Literacy and Perceived Economic Outcomes
David Puelz and Robert Puelz
Submitted (2021)
[SSRN:3302978]

Portfolio Selection for Individual Passive Investing David Puelz, P. Richard Hahn, and Carlos Carvalho Applied Stochastic Models in Business and Industry (2019) [link to journal]

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 Society for Political Methodology Annual Meeting — NYU

Virtual — July 2021

Is Machine Learning Useful for Modeling the Cross-Section of Returns? Statistical Methods in Finance Conference Virtual — June 2021

Randomization Tests of Causal Effects Under General Interference International Indian Statistical Association Annual Meeting Virtual — May 2021

Randomization Tests of Causal Effects Under General Interference Arizona State University Virtual — November 2020

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

PolMeth Faculty Poster Award

Society for Political Methodology Annual Conference — 2019

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: Journal of the American Statistical Association, Annals of Applied Statistics, Journal of Business and Economic Statistics, Neural Computing and Applications, Canadian Journal of Statistics, Econometrics and Statistics, Journal of Statistical Theory and Practice.

Chicago Booth Research Staff Advisory Group, 2020 - present.

Employment

i-360, LLC 2018 - present

Data Science Team

Part-time Econometric Consulting

Goldman Sachs & Co. 2011 - 2012

Investment Management Division

Analyst

(updated July 2021)