David Puelz

Experience

The University of Texas at Austin

2021 - present

McCombs School of Business and Salem Center for Policy

Assistant Professor of Finance (clinical) and Director of Policy Analytics

The University of Chicago

2018 - 2021

Booth School of Business

Principal Researcher

Interests: causal inference, randomizations, networks, machine learning, applications of statistics

The University of Texas at Austin

2013 - 2018

McCombs School of Business

Graduate Research Assistant

Education

The University of Texas at Austin

2018

McCombs School of Business

Ph.D., Statistics

Topics: Bayesian modeling, causal inference, applications of statistics

The University of Texas at Austin

2015

McCombs School of Business

M.S., Statistics

Wesleyan University

2011

Honors in Mathematics, Phi Beta Kappa

B.A., Mathematics and Physics

Publications

Financial Literacy and Financial Well-being

David Puelz, Myeongrok Doh, and Robert Puelz

In preparation (2023)

Posterior Summarization for Time Varying Dynamic Bayesian Networks

Si Kai Lee, Sam Wang, David Puelz, and Mladen Kolar

In preparation (2023)

Fear the Reaper: Estimating the Effect of Drone Strikes on Terrorist Violence using Bayesian Causal Forests

Taylor Cox and David Puelz

In preparation (2023)

Fisher meets BART: Integrating Causal Machine Learning and Randomization Tests

David Puelz, Jungho Lee, and Panos Toulis

In preparation (2023)

The Disutility of SEIR Model Forecasts During the COVID-19 Pandemic

Tarini Sudhakar, Ashna Bhansali, John Walkington, and David Puelz

Submitted (2023)

BicliqueRT: A Software Package for Causal Testing and Experimental Design Under Interference Shunzhuang Huang, Panos Toulis, and David Puelz

In preparation (2023)

[link to github]

A Graph-Theoretic Approach to Randomization Tests of Causal Effects Under General Interference David Puelz, Panos Toulis, Guillaume Basse, and Avi Feller Journal of the Royal Statistical Society, Series B (2022) [link to journal]

Financial Literacy and Perceived Economic Outcomes David Puelz and Robert Puelz Statistics and Public Policy (2022) [link to journal]

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]

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

Causal Machine Learning University of Texas at Austin — Texas Women in Economics invited speaker Austin, TX — October 2023

Causal Effect Testing under Interference University of Texas at Austin — Salem Center for Policy Causal Inference Seminar Austin, TX — May 2022 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

Teaching (UT Austin)

Policy Research Lab — Undergraduate — 2021, 2022, 2023

Data Science for Economics and Policy — Undergraduate — 2023

Statistics for Executives — Executive MBA — 2023

Introduction to Machine Learning — MSBA (full-time and working professionals) — 2021, 2022, 2023

Machine Learning in Finance — PhD — 2022

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, Journal of the Royal Statistical Society, 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 - 2021.

Employment

Goldman Sachs & Co. Investment Management Division

Analyst

2011 - 2012