

Experience

The University of Austin Center for Science, Technology, Engineering, and Mathematics Associate Professor of Statistics and Data Science	2024 - present
The University of Texas at Austin School of Civic Leadership and McCombs School of Business Assistant Professor of Instruction and Director of Policy Research Lab	2021 - 2024
The University of Chicago Booth School of Business Principal Researcher Interests: <i>causal inference, randomizations, networks, machine learning, applications of statistics</i>	2018 - 2021
The University of Texas at Austin McCombs School of Business Graduate Research Assistant	2013 - 2018

Education

The University of Texas at Austin McCombs School of Business Ph.D., Statistics Topics: <i>Bayesian modeling, causal inference, applications of statistics</i>	2018
The University of Texas at Austin McCombs School of Business M.S., Statistics	2015
Wesleyan University Honors in Mathematics, Phi Beta Kappa B.A., Mathematics and Physics	2011

Publications

Heterogeneous Treatment Effect Estimation under Noncompliance with Bayesian Tree Ensembles
Jared Fisher, David Puelz, and Sameer Deshpande
Submitted (2025)

The Impact of Financial Literacy on Well-being: Heterogeneous Effects from Bayesian Tree Ensembles
David Puelz, Myeongrok Doh, and Robert Puelz
Submitted (2025)

Identification of High-risk Variables for Pediatric Patients with Anomalous Aortic Origin of the Right Coronary using Statistical Modeling

Charles Puelz and David Puelz

In preparation (2025)

Identity Authoritarianism and Religious Replacement

David Puelz and Morgan Marietta

In preparation (2025)

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)

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

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

Frontiers in Epidemiology (2024)

[\[link to journal\]](#)

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 16 (2021). No 3

[\[link to journal\]](#)

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

Identification of High-risk Variables for Pediatric Patients with Anomalous Aortic Origin of the Right Coronary Artery

Texas Children's Hospital

Houston, TX — December 2024

Randomization, Machine Learning, and Everything in Between

New College of Florida

Sarasota, FL — February 2024

Randomization, Machine Learning, and Everything in Between

University of Austin

Austin, TX — January 2024

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

The University of Austin

Foundations of Science I — Undergraduate — 2025
Quantitative Reasoning II — Undergraduate — 2025
Special Topics: Statistical Learning — Undergraduate — 2025
Quantitative Reasoning I — Undergraduate — 2024

UT Austin

Introduction to Machine Learning — MSBA (full-time and working professionals) — 2021, 2022, 2023, 2024
Policy Research Lab — Undergraduate — 2021, 2022, 2023, 2024
Data Science for Business Applications — Undergraduate — 2023
Data Science for Economics and Policy — Undergraduate — 2023
Statistics for Executives — Executive MBA — 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

Statistical Expert Witness	2023 - present
Goldman Sachs & Co. Investment Management Division Analyst	2011 - 2012