

Education

- Ph.D., Political Science. **University of Wisconsin-Madison.** **2011**
Dissertation Title: “Data-Driven Discovery for Political Science.”
Advisor: David L. Weimer
- M.S., Statistics. **University of Wisconsin-Madison.** **2010**
- M.A., Political Science. **University of Wisconsin-Madison.** **2010**
- B.A., College Scholar. **Cornell University.** **2000**
Honors Thesis: “A Formal Model For Estimating PAC Preferences Over Legislators.”
Advisor: Walter R. Mebane, Jr.

Positions

- Professor and Chair of Social Data Science, Department of Political Science, University of Mannheim **2023-**
- Assistant Professor, Department of Politics, **Princeton University** **2013-2023**
- Lecturer, Department of Politics and Woodrow Wilson School of Public and International Affairs, **Princeton University.** **2012-2013**
- Postdoctoral Fellow in the Program for Quantitative and Analytical Political Science, **Princeton University.** **2011-2012**
- Predocotrual Fellow in the Program for Quantitative and Analytical Political Science, **Princeton University.** **2010-2011**

Affiliations

Mannheim Center for European Social Research (MZES)

Research

Publications in Refereed Journals

- “Relaxing Assumptions, Improving Inference: Integrating Machine Learning and the Linear Regression.” 2023. *American Political Science Review*. 117(3): 1053-1069.
- “Causal Inference through the Method of Direct Estimation.” *Journal of Politics*. 85(2): 421-435. With Dustin Tingley.
- “Scaling Data from Multiple Sources.” 2021. *Political Analysis*. 29(2): 212-235. With Ted Enamorado and Gabriel Lopez-Moctezuma.
- “The Effects of Political Institutions on the Extensive and Intensive Margins of Trade.” 2019. *International Organization*. 73(4): 755-792. With In Song Kim and John Londregan.
- “Estimating Spatial Preferences from Votes and Text.” 2018. *Political Analysis*. 26(2): 210-229. With In Song Kim and John Londregan.
- “Sparse Estimation with Uncertainty: Subgroup Analysis in Large Dimensional Designs.” 2017. *Political Analysis*. 25(1): 1-40. Lead Article. With Dustin Tingley.

“Robust Estimation of Inverse Propensity Weights for Marginal Structural Models.” 2015, *Journal of the American Statistical Association*. 110(511): 1013-1023. Lead Article. With Kosuke Imai.

“Covariate Balancing Propensity Score.” 2014. *Journal of the Royal Statistical Society: Series B*. 76(1): 243-263. With Kosuke Imai.

“Estimating Treatment Effect Heterogeneity in Randomized Program Evaluation.” 2013. *Annals of Applied Statistics*. 7(1): 443-470. With Kosuke Imai.

“Finding Jumps in Otherwise Smooth Curves: Identifying Critical Events in Political Processes.” 2010. *Political Analysis* 18(1): 57-77. With Kevin H. Eng.

Chapters in Edited Volumes

“Subgroup Analysis: Pitfalls, Promise, and Honesty.” 2021. *Advances in Experimental Political Science*. Cambridge University Press (J. Druckman and D. Green, eds.).

Working Papers

“Improving Variable Importance Measures.” With Zenobia Chan.

“Sparse Multilevel Regression and Poststratification.” With Max Goplerud, Shiro Kuriwaki, and Dustin Tingley.

“Bicoordinate Descent for the LASSO.” With In Song Kim and John Londregan.

Published Software

“PLCE: R package for Semiparametrically Efficient Causal Effect Estimation with Binary and Continuous Treatment Variables.” Available through the Comprehensive R Archive Network.

“sparsereg: R package for Sparse Bayesian Models for Regression, Subgroup Analysis, and Panel Data.” With Dustin Tingley. Available through the Comprehensive R Archive Network.

“CBPS: R Package for Covariate Balancing Propensity Score.” With Kosuke Imai and Christian Fong. Available through the Comprehensive R Archive Network.

“FindIt: R Package for Estimating Heterogeneous Treatment Effects.” With Kosuke Imai. Available through the Comprehensive R Archive Network.

Grants and Awards

Minerva Research Initiative Grant. “Reforging Identity: Comparative Ethnographic Studies of Influence Operations in Taiwan and Estonia.” \$852,031.

Stanley Kelley, Jr. Award for Excellence in Teaching. Department of Politics, Princeton University. May 12, 2021.

Gosnell Prize for Excellence in Political Methodology, for “Sparse Estimation with Uncertainty: Subgroup Analysis in Large Dimensional Designs.” With Dustin Tingley. July 22, 2016.

Thomas R. Ten Have Memorial Award for Best Poster, for “Identification of Treatment Effect Heterogeneity as a Variable Selection Problem.” With Kosuke Imai. Atlantic Causal Inference Conference, Ann Arbor. May 20, 2011.

Nomination for Best Paper, for “Identification of Treatment Effect Heterogeneity as a Variable Selection Problem.” With Kosuke Imai. Annual Midwest Political Science Association Meeting, Chicago. April 1, 2011.

Department of Political Science Teaching Award. University of Wisconsin-Madison. Fall, 2007.

Teaching Experience

Professor and Chair of Social Data Science, University of Mannheim	2023-
Developing a Masters in Social Data Science, Starting 2024	
Instructor, ICPSR, University of Michigan	2023
Bayes II: Machine Learning and Large Language Models	
Assistant Professor and Lecturer, Princeton University	2012-2023
Undergraduate and Graduate: Quantitative Analysis and Politics; Applied Quantitative Analysis; Policy Research Seminar	2006-2010
Teaching Assistant, University of Wisconsin-Madison	
Ph.D. Level: Regression for Political Science.	
Masters Level: Statistics for Public Policy I and II.	
Undergraduate Level: Intro to American Government.	2010
Instructor, University of Wisconsin-Madison	2002-2005
R Short Course, Social Science Computing Center.	
Math Teacher, New York City	
Intermediate School 392. Brooklyn, NY.	

Selected Invited Talks

September 10, 2021. “Estimation and Inference on Nonlinear and Heterogeneous Effects.” ICML. With Dustin Tingley.

November 4, 2019. “Rehabilitating the Regression: Honest and Valid Causal Inference through Machine Learning.” University of Michigan ISQM Seminar.

October 28, 2019. “Rehabilitating the Regression: Honest and Valid Causal Inference through Machine Learning.” New York University Methods Seminar.

May 13, 2019. “Rehabilitating the Regression: Honest and Valid Causal Inference through Machine Learning.” Duke University Methods Seminar.

May 20, 2018. “The Effects of Political Institutions on the Extensive and Intensive Margins of Trade.” V-Dem Institute, Gothenburg, Sweden.

February 26, 2018. “Causal Inference through the Method of Direct Estimation.” Ulric B. and Evelyn L. Bray Social Science Seminar Series, California Institute of Technology.

March 8, 2017. “Causal Inference through the Method of Direct Estimation.” Yale Methods Seminar.

April 27, 2017. “Causal Inference through the Method of Direct Estimation.” IQSS, Harvard.

What If? Machine Learning for Causal Inference. February 2016. Harvard and MIT.

Annual Summer Meeting, Society for Political Methodology. July 26, 2014.

Summer School in Quantitative Methods, Empirical Political Economy Network. May 19-20, 2014. CIDE, Mexico City.

Annual Meeting of the Society for Political Methodology. July 19, 2012. University of North Carolina-Chapel Hill.

Machine Learning Seminar. March 14, 2012. Department of Computer Science, Princeton University.

Thomas R. Ten Have Memorial Presentation. May 25, 2012. Atlantic Causal Inference Conference, Johns Hopkins University.

Experiments Seminar. September 8, 2011. Institution for Social and Policy Studies, Yale University.

Annual Meeting of the Society for Political Methodology. July 29, 2011. University of North Carolina-Chapel Hill.

Annual Meeting of the Midwest Political Science Association. April 1, 2011. Chicago, IL.

New Faces in Political Methodology Conference. May 1, 2010. Quantitative Social Science Initiative, Pennsylvania State University.

Memberships

American Political Science Association, Midwest Political Science Association,
Society for Political Methodology, American Statistical Association.