

DAE WOONG HAM

Mobile 6177928525 | Email daewoong@umich.edu | Website daewoongham.com

Ross School of Business, Room R5328, 701 Tappan Ave, Ann Arbor, MI 48109

BIOSKETCH

My research interest is in solving complex causal inference problems motivated by real-world scenarios specifically in business and political science applications. I was advised by Kosuke Imai and Lucas Janson in the Statistics Department at Harvard.

EMPLOYMENT

University of Michigan - Ann Arbor

Assistant Professor in Ross Business School: Technology and Operations

2024 - Current

Netflix Experimentation

- Collaboration with Netflix experimentation team since 2022 May. Internship at 2023 summer. Research currently utilized daily on Netflix's experimentation platform

2023 - 2023

EDUCATION

Harvard University

Ph.D. in Statistics

2019 - 2024

University of California Berkeley

Bachelor of Arts in Applied Mathematics and Statistics

2015 - 2019

PAPERS

1) **D. Ham**, L. Janson, K. Imai. Using Machine Learning to Test Hypothesis in Conjoint Analysis, *Political Analysis* 2024
<https://arxiv.org/abs/2201.08343>

2) **D. Ham**, L. Miratrix. Benefits and costs of matching prior to a Difference in Difference analysis when parallel trends does not hold, *Annals of Applied Statistics* 2024
<https://arxiv.org/abs/2205.08644>

3) **D. Ham**, J. Qie. Hypothesis Testing in Sequentially Sampled Data: ART to Maximize Power Beyond iid Sampling, *TEST* 2023
<https://link.springer.com/article/10.1007/s11749-023-00861-2>

4) **D. Ham**, I. Bojinov, M. Lindon, M. Tingley. Design-Based Confidence Sequence for Anytime-Valid Inference. 2022
<https://arxiv.org/abs/2210.08639>

5) M. Lindon, **D. Ham**, M. Tingley, I. Bojinov. Anytime-Valid F-Tests for Faster Sequential Experimentation Through Covariate Adjustment, 2022
<https://arxiv.org/abs/2210.08589>

6) **D. Ham**, I. Bojinov, M. Lindon, M. Tingley. Design-Based Inference for Multi-arm Bandits. 2023
<https://arxiv.org/abs/2302.14136>

7) **D. Ham**, I. Bojinov, M. Lindon, M. Tingley. Anytime-valid Causal Inference for Randomized Experiments in Panel and Longitudinal Settings. 2023

INVITED CONFERENCE

American Causal Inference Conference (UC Berkeley)

2022 May

- D. Ham, L. Miratrix. Quantifying the benefits and costs of matching prior to a Difference in Difference analysis when the parallel trend assumption does not hold

Society for Political Methodology (University of Washington Saint Louis)

2022 July

- D. Ham, L. Janson, K. Imai. Using Machine Learning to Test Hypothesis in Conjoint Analysis (2022)

American Political Science Association (Montreal)

2022 September

- D. Ham, L. Janson, K. Imai. Using Machine Learning to Test Hypothesis in Conjoint Analysis (2022)

Conference on Digital Experimentation (MIT)

2022 October

- D. Ham, I. Bojinov, M. Lindon, M. Tingley. Design-Based Confidence Sequence for Anytime-Valid Inference (2022)

American Causal Inference Conference (UT Austin)

2023 May

- D. Ham, I. Bojinov, M. Lindon, M. Tingley. Design-Based Confidence Sequence for Anytime-Valid Inference (2022)

Society for Political Methodology (Stanford University)

2023 June

- D. Ham, I. Bojinov, M. Lindon, M. Tingley. Design-Based Confidence Sequence for Anytime-Valid Inference (2022)

Joint Statistical Meeting (Portland Oregon)

2024 August

- D. Ham, I. Bojinov, M. Lindon, M. Tingley. Design-Based Confidence Sequence for Anytime-Valid Inference (2022)

TEACHING

$$\delta_{\theta} := \mu_{\theta,1} - \mu_{\theta,0}, \quad \Delta_{\theta} := \beta_{\theta,1} - \beta_{\theta,0}$$

Stat 186 (Harvard Undergraduate Class): Causal Inference, Spring 2022

Stat 286 (Harvard Graduate Class): Causal Inference with Applications, Spring 2021

Stat 139 (Harvard Undergraduate Class): Linear Modeling, Fall 2020

SOFTWARE

Proficient in R and Python

Author of CRTConjoint package in the Comprehensive R Archive Network and Github (2022)

CRAN link: <https://cran.r-project.org/web/packages/CRTConjoint/index.html>

Github link: <https://github.com/daewoongham97/CRTConjoint>

Note: All code, including errors, are written and maintained by me