Adam Zaid Austin Bouyamourn

210 Social Science Building, Berkeley, CA

Email github Website

Education

UC Berkeley 2018 - June 2025 (anticipated)
PhD in Political Science

`Committee:` Thad Dunning (Chair), Kirk Bansak, Erin Hartman, Peng Ding, Avi Feller.

`Subfields`: Methodology and Formal Theory (with Distinction), Models and Politics, Political Behavior.

Georgetown University 2016-2018
MPP (Master of Public Policy)

University of Oxford 2008-2011
MA in Philosophy, Politics and Economics

Job Market Paper

Where To Experiment? A Best Subsets Ensemble for Purposive Site Selection.

Choosing where to conduct an experiment when a researcher is faced with a universe of possible sites is an important area of active research. I develop a new method to select experimental sites optimal in terms of Mean Squared Error for the Population Average Treatment Effect (PATE) and the Conditional Average Treatment Effect (CATE). I show that the PATE site selection problem requires choosing a selection that minimizes the distance of covariate mean vectors between subset and population. The CATE site selection problem minimizes the distributional discrepancy between the selected sites and the population. Advances in mixed integer programming mean that computationally efficient algorithms are available to solve these problems to provable optimality.

Publications

1. Adam Bouyamourn, forthcoming. Collusive and Adversarial Replication. *Research and Politics.*
2. Adam Bouyamourn, 2023. Why LLMs Hallucinate, And How To Get (Evidential) Closure: Perceptual, Intensional and Extensional Learning for Faithful Natural Language Generation. *EMNLP.*
3. Lucas Spangher, Akash Gokul, Manan Khattar, Joseph Palakapilly, Akaash Tawade, Adam Bouyamourn, Alex Devonport, and Costas Spanos. 2020. Prospective Experiment for Reinforcement Learning on Demand Response in a Social Game Framework. *ACM e-Energy.*

Working Papers

The Power of Prognosis: Informativeness-weighted Covariate Balance Tests (with Clara Bicalho and Thad Dunning).

Papers in Progress

`Causal Inference, Machine Learning and Optimization`

Stacked Best Subsets for Sparse Heterogeneous Treatment Effect Estimation.

Distributionally Robust Optimization and Causal Inference.

Protected Characteristics in Lending Decisions (with Emily Diana and Alexander Tolbert)

`Selective Inference and Formal Theory`

Pre-Analysis Plans and External Validity (with Tak-Huen Chau).

On Double-Dipping.

Invited Presentations

Caltech. "The Political and Economic Implications of AI"	2024
EC. Workshop, Incentives in Academia.	2024
EMNLP	2023
PolMeth	2023, 2024
UC Berkeley Methods Workshop.	2023, 2024
Neurips. Workshop, Causal ML for Real World Impact.	2022
ACIC	2022, 2024
APSA	2021
Research Workshop in American Politics, UC Berkeley	2019

Teaching

Graduate Student Instructor, UC Berkeley	
The Politics of Displacement	Spring 2024
Formal Models in Political Science	Spring 2023
Quantitative Methods in Political Science (undergraduate)	Spring 2022
Quantitative Methods in Political Science (graduate)	Spring 2021
Introduction to American Politics	Fall 2019, Spring 2020
Teaching Assistant, ICPSR	
Race, Ethnicity and Quantitative Methodology	Summer 2018
Recitation Instructor, Georgetown University	
Introduction to R	Spring 2018

Service

Convenor, Methods Workshop, UC Berkeley	Spring 2023
Graduate Diversity Representative, Omnibus Search Committee, UC Berkeley	Fall 2022
Graduate Diversity Representative, PhD Admissions Committee, UC Berkeley	Spring 2022

Awards and Fellowships

Summer Dissertation Writing Fellowship, UC Berkeley	2024
Data Science Fellowship, D-Lab, UC Berkeley	2021
Morgenstern Fellowship, Mercatus Center	2020
Baker Innovation Grant, Georgetown University Awarded a grant to design and implement a public policy intervention.	2018
McCourt Scholarship, Georgetown University Awarded to top 5 applicants to the McCourt School of Public Policy.	2016
Academic Scholarship, Choral Scholarship, Worcester College, University of Oxford	2011

Work Experience

Apple, Health AI, AI/ML. Machine Learning Research Scientist Intern.	Summer 2022
The National, Economics Correspondent.	2013 - 2016
The Guardian, Subeditor.	2011 - 2013
Office of the Deputy Prime Minister, Cabinet Office, HM Government. Intern.	Summer 2010

Languages

Python, R, SQL, Spark, Stata