

Eli Ben-Michael

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EDUCATION

University of California, Berkeley, Berkeley, CA December 2020
PhD in Statistics, Dissertation Committee: Avi Feller, Peng Ding, Jesse Rothstein, Bin Yu
Columbia University, Columbia College, New York, NY May 2016
Bachelor of Arts, *Summa Cum Laude*, Computer Science and Statistics

ACADEMIC APPOINTMENTS

Carnegie Mellon University, Pittsburgh, PA August 2022 -
Heinz College of Information Systems & Public Policy
Department of Statistics & Data Science
Assistant Professor
Harvard University, Cambridge, MA January 2021 - August 2022
Department of Statistics
Institute for Quantitative Social Science
Postdoctoral Fellow

FORTHCOMING AND PUBLISHED ARTICLES

- Ben-Michael, E.**, K. Imai, and Z. Jiang (2024+). Policy Learning with Asymmetric Counterfactual Utilities. *Journal of the American Statistical Association*
- Lin, V., L. P. Morency, and **E. Ben-Michael** (2023). Text-Transport: Toward Learning Causal Effects of Natural Language. In *Conference on Empirical Methods in Natural Language Processing*
- Ben-Michael, E.** and L. Keele (2023). Using Balancing Weights to Target the Treatment Effect on the Treated when Overlap is Poor. *Epidemiology* 4(34), 637–644
- Ben-Michael, E.**, A. Feller, and E. Hartman (2023). Multilevel calibration weighting for survey data. *Political Analysis*
- Soriano, D., **E. Ben-Michael**, P. J. Bickel, A. Feller, and S. D. Pimentel (2023). Interpretable Sensitivity Analysis for Balancing Weights. *Journal of the Royal Statistical Society, Series A: Statistics in Society*
- Ben-Michael, E.**, A. Feller, and J. Rothstein (2023). Varying Impacts of Letters of Recommendation on College Admissions. *The Annals of Applied Statistics* 17(4), 2843–2864
(American Statistical Association Social Statistics Section Student Paper Award winner)
- Lu, B., **E. Ben-Michael**, A. Feller, and L. Miratrix (2023). Is it who you are or where you are? Accounting for compositional differences in cross-site treatment variation. *Journal of Educational and Behavioral Statistics* 48(4), 420–453
- Ben-Michael, E.**, D. Arbour, A. Feller, A. Franks, and S. Raphael (2023). Estimating the effects of a California gun control program with Multitask Gaussian Processes. *The Annals of Applied Statistics* 17(2), 985–1016
- Keele, L. J., **E. Ben-Michael**, A. Feller, R. Kelz, and L. Miratrix (2023). Hospital Quality Risk Standardizations via Approximate Balancing Weights. *The Annals of Applied Statistics* 17(2), 901–928
- Ben-Michael, E.**, A. Feller, and J. Rothstein (2022). Synthetic controls with staggered adoption. *Journal of the Royal Statistical Society. Series B: Statistical Methodology* 84(2), 351–381
(SF ASA Student Travel Award winner, Thomas R. Ten Have Poster Award runner up)
- Haber, N. A., E. Clarke-Deelder, A. Feller, E. R. Smith, J. A. Salomon, B. MacCormack-Gelles, E. M. Stone, C. Bolster-Foucault, J. R. Daw, L. A. Hatfield, C. E. Fry, C. B. Boyer, **E. Ben-Michael**, C. M. Joyce, B. S. Linas, I. Schmid, E. H. Au, S. E. Wieten, B. Jarrett, C. Axfors, V. T. Nguyen, B. A. Griffin, A. Bilinski, and E. A. Stuart (2022). Problems with evidence assessment in COVID-19

health policy impact evaluation: A systematic review of study design and evidence strength. *BMJ Open* 12(1)

Ben-Michael, E., A. Feller, and J. Rothstein (2021). The Augmented Synthetic Control Method. *Journal of the American Statistical Association* 116(536), 1789–1803

Ben-Michael, E., A. Feller, and E. Stuart (2021). A trial emulation approach for policy evaluations with group-level longitudinal data. *Epidemiology* 32, 533–540

Elser, H., **E. Ben-Michael**, D. Rehkopf, S. Modrek, E. A. Eisen, and M. R. Cullen (2019). Layoffs and the mental health and safety of remaining workers: a difference-in-differences analysis of the US aluminium industry. *Journal of Epidemiology and Community Health* 73, 1094–1100

PREPRINTS AND WORKING PAPERS

Sun, L., E. Ben-Michael, and A. Feller (2023). Using Multiple Outcomes to Improve the Synthetic Control Method. arXiv:2311.16260

Jia, Z., **E. Ben-Michael**, and K. Imai (2023). Bayesian Safe Policy Learning with Chance Constrained Optimization: Application to Military Security Assessment during the Vietnam War. arXiv:2307.08840

Ben-Michael, E., L. Page, and L. Keele (2023). Approximate Balancing Weights for Clustered Observational Study Designs. arXiv:2301.05275

Ben-Michael, E., A. Feller, R. Kelz, and L. Keele (2022). Estimating Racial Disparities in Emergency General Surgery. arXiv:2209.0431

Zhang, Y., **E. Ben-Michael**, and K. Imai (2022). Safe Policy Learning under Regression Discontinuity Designs. arXiv:2208.13323

(Yi Zhang: American Statistical Association Social Statistics Section Student Paper Award winner)

Ben-Michael, E., D. A. Hirshberg, A. Feller, and J. Zubizarreta (2021). The Balancing Act in Causal Inference. arXiv:2110.14831

Ben-Michael, E., D. J. Greiner, K. Imai, and Z. Jiang (2021). Safe Policy Learning through Extrapolation: Application to Pre-trial Risk Assessment. arXiv:2109.11679

BOOK CHAPTERS

Cohn, E. R., **E. Ben-Michael**, A. Feller, and J. R. Zubizarreta (2023). Balancing Weights for Causal Inference. In J. R. Zubizarreta, E. A. Stuart, D. S. Small, and P. R. Rosenbaum (Eds.), *Handbook of Matching and Weighting Adjustments for Causal Inference* (1 ed.), Chapter 16, pp. 293–312. Boca Raton, FL: Chapman & Hall/CRC

OPEN SOURCE STATISTICAL SOFTWARE

[augsynth](#): R implementation of the augmented synthetic control method

[multical](#): R package for multilevel calibration weighting

PRESENTATIONS

Invited

2023

International Conference on Health Policy Statistics; Cowles Foundation Conference on Econometrics; Joint Statistical Meetings; University of Pittsburgh

2022

London School of Hygiene and Tropical Medicine, Centre for Statistical Methodology; Joint Statistical Meetings; LinkedIn; National Research Conference on Firearm Injury Prevention; IMS International Conference on Statistics and Data Science; International Conference on Computational and Methodological Statistics; Bank of England

2021
 Johns Hopkins CICADAS Seminar; RAND Center for Causal Inference Symposium; Johns Hopkins Causal Inference Seminar; Harvard Applied Statistics Workshop; Berkeley Machine Learning and Science Forum

2020
 Online Causal Inference Seminar

Contributed

2023
 American Causal Inference Conference

2022
 American Causal Inference Conference

2021
 Asian Political Methodology Meetings; ENAR Spring Meeting; Annual Meeting of the Society for Political Methodology; Joint Statistical Meetings (ASA Social Statistics Section Student Paper Award Winner)

2020
 Annual Meeting of the Society for Political Methodology; Joint Statistical Meetings (SFASA Student Travel Award winner); Econometric Society World Congress; Association for Public Policy Analysis & Management Fall Research Conference; BigSurv20

2019
 Society for Research on Educational Effectiveness; Atlantic Causal Inference Conference (Thomas R. Ten Have Poster Award runner up); Berkeley-Stanford Econometrics Jamboree

2018
 7th Causal Inference Workshop at UAI; European Winter Meeting of the Econometric Society

AWARDS AND HONORS

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|---|------|
| American Causal Inference Conference Travel Award | 2022 |
| American Statistical Association Social Statistics Section Student Paper Award | 2021 |
| American Statistical Association, San Francisco Bay Area Chapter, Student Travel Award | 2020 |
| Department fellowship, Department of Statistics, U.C. Berkeley | 2018 |
| Two years of funding through RTG grant: Advancing Machine Learning - Causality and Interpretability | |
| Phi Beta Kappa, Columbia University | 2016 |
| Computer Science Department Award, Columbia University | 2016 |
| Given to the top two graduating seniors each year | |

TEACHING

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| Carnegie Mellon University | |
| 36-402: Advanced Data Analysis | Spring 2023 |
| U.C. Berkeley Department of Statistics <i>Graduate Student Instructor</i> | |
| Stat 232: Experimental Design with Sam Pimentel | Fall 2018 |
| Stat 159/259: Reproducible and Collaborative Data Science with Fernando Perez | Fall 2017 |

INSTITUTIONAL SERVICE

PhD admissions committee, Department of Statistics, UC Berkeley

Spring 2020

Co-president of the Berkeley Statistics Graduate Student Association

Fall 2018 - Spring 2019

Reviewer for *American Journal of Epidemiology*, *Annals of Applied Statistics*, *Biometrical Journal*, *Biometrics*, *Biometrika*, *Econometrica*, *Epidemiology*, *INFORMS Journal on Data Science*, *Journal of the American Statistical Association*, *Journal of Applied Econometrics*, *Journal of Business & Economic Statistics*, *Journal of Causal Inference*, *Journal of Econometrics*, *Journal of Educational and Behavioral Statistics*, *Journal of Quantitative Criminology*, *Journal of the Royal Statistical Society, Series A, B, and C*, *Management Science*, *Political Analysis*, *Population Health Metrics*, *Quantitative Economics*, *Statistics in Medicine*, and *Statistics and Public Policy*

WORK EXPERIENCE

Uber, New York, NY

Summer 2019

Data Science Intern

Walmart Labs, Sunnyvale, CA

Summer 2017

Machine Learning Scientist Intern

Knewton, New York, NY

Summer 2016

Data Science Intern