

# 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  
Institute for Quantitative Social Science  
Department of Statistics  
*Postdoctoral Fellow*

## PUBLISHED ARTICLES

- Ben-Michael, E.**, D. Arbour, A. Feller, A. Franks, and S. Raphael (2022+). Estimating the effects of a California gun control program with Multitask Gaussian Processes. *The Annals of Applied Statistics*
- Keele, L., **E. Ben-Michael**, A. Feller, R. Kelz, and L. Miratrix (2022+). Hospital quality risk standardization via approximate balancing weights. *The Annals of Applied Statistics*
- 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

- Ben-Michael, E.** and L. Keele (2022). Using Balancing Weights to Target the Treatment Effect on the Treated when Overlap is Poor. [arXiv:2210.01763](https://arxiv.org/abs/2210.01763)
- Ben-Michael, E.**, A. Feller, R. Kelz, and L. Keele (2022). Estimating Racial Disparities in Emergency General Surgery. [arXiv:2209.0431](https://arxiv.org/abs/2209.0431)
- Zhang, Y., **E. Ben-Michael**, and K. Imai (2022). Safe Policy Learning under Regression Discontinuity Designs. [arXiv:2208.13323](https://arxiv.org/abs/2208.13323)

- Ben-Michael, E.**, K. Imai, and Z. Jiang (2022). Policy Learning with Asymmetric Utilities. arXiv:2206.10479
- 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
- Lu, B., **E. Ben-Michael**, A. Feller, and L. Miratrix (2021). Is it who you are or where you are? Accounting for compositional differences in cross-site treatment variation. arXiv:2103.14765
- Soriano, D., **E. Ben-Michael**, P. J. Bickel, A. Feller, and S. D. Pimentel (2021). Interpretable Sensitivity Analysis for Balancing Weights. arXiv:2102.13218
- Ben-Michael, E.**, A. Feller, and E. Hartman (2021). Multilevel calibration weighting for survey data. arXiv:2102.09052
- Ben-Michael, E.**, A. Feller, and J. Rothstein (2020). Variation in impacts of letters of recommendation on college admissions decisions: Approximate balancing weights for treatment effect heterogeneity in observational studies. arXiv:2008.04394  
(American Statistical Association Social Statistics Section Student Paper Award winner)

## OPEN SOURCE STATISTICAL SOFTWARE

- [augsynth](#): R implementation of the augmented synthetic control method
- [multical](#): R package for multilevel calibration weighting

## PRESENTATIONS

2022

London School of Hygiene and Tropical Medicine, Centre for Statistical Methodology; American Causal Inference Conference; Joint Statistical Meetings; LinkedIn

2021

Asian Political Methodology Meetings; ENAR Spring Meeting; Johns Hopkins CICADAS Seminar; RAND Center for Causal Inference Symposium; Annual Meeting of the Society for Political Methodology; Joint Statistical Meetings (ASA Social Statistics Section Student Paper Award Winner); Johns Hopkins Causal Inference Seminar; Harvard Applied Statistics Workshop; Berkeley Machine Learning and Science Forum

2020

Annual Meeting of the Society for Political Methodology; Joint Statistical Meetings (SFASA Student Travel Award winner); Econometric Society World Congress; Online Causal Inference Seminar; 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 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  
Given to the top two graduating seniors each year

2016

## TEACHING

**U.C. Berkeley Department of Statistics** *Graduate Student Instructor*

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

## WORK EXPERIENCE

**Uber**, New York, NY  
*Data Science Intern*

Summer 2019

**Walmart Labs**, Sunnyvale, CA  
*Machine Learning Scientist Intern*

Summer 2017

**Knewton**, New York, NY  
*Data Science Intern*

Summer 2016