# 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 Heinz College of Information Systems & Public Policy Department of Statistics & Data Science

Assistant Professor

Harvard University, Cambridge, MA Institute for Quantitative Social Science Department of Statistics Postdoctoral Fellow January 2021 - August 2022

August 2022 -

#### 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
- 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

- 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. Zubizarrta (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

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

#### **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

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, 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