### 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

Harvard University, Cambridge, MA

January 2021 - Present

Postdoctoral Fellow, Institute for Quantitative Social Science and Department of Statistics

#### PUBLISHED ARTICLES

**Ben-Michael, E.**, A. Feller, and J. Rothstein (2021+). Synthetic controls with staggered adoption. Journal of the Royal Statistical Society, Series B

(SF ASA Student Travel Award winner, Thomas R. Ten Have Poster Award runner up)

Ben-Michael, E., A. Feller, and J. Rothstein (2021). The augmented synthetic control method. *Journal* of the American Statistical Association

**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., 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
- Arbour, D., E. Ben-Michael, A. Feller, A. Franks, and S. Raphael (2021). Using Multitask Gaussian Processes to estimate the effect of a targeted effort to remove firearms. arXiv:2110.07006
- 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
- Ben-Michael, E., A. Feller, and S. Raphael (2021). The Effect of a Targeted Effort to Remove Firearms from Prohibited Persons on State Murder Rates
- 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)
- Keele, L., E. Ben-Michael, A. Feller, R. Kelz, and L. Miratrix (2020). Hospital quality risk standardization via approximate balancing weights. arXiv:2007.09056

# OPEN SOURCE STATISTICAL SOFTWARE

augsynth: R implementation of the augmented synthetic control method

multical: R package for multilevel calibration weighting

# PRESENTATIONS

TRESENTATIONS	
Safe policy learning through extrapolation  Harvard Applied Statistics Workshop	October 2021
Johns Hopkins Causal Inference Seminar	October 2021
Multilevel calibration weighting for survey data  Annual Meeting of the Society for Political Methodology  Asian Political Methodology Meetings  BigSurv20	July 2021 January 2021 November 2020
Varying impacts of letters of recommendation on college admissions  Joint Statistical Meetings (ASA Social Statistics Section Student Paper Award Winner)  RAND Center for Causal Inference Symposium  Annual Meeting of the Society for Political Methodology	August 2021 June 2021 July 2020
A trial emulation approach for policy evaluations with group-level longitudinal data Association for Public Policy Analysis & Management Fall Research Conference	November 2020
Synthetic controls with staggered adoption  Johns Hopkins CICADAS Seminar  ENAR Spring Meeting  Online Causal Inference Seminar  Econometric Society World Congress  Joint Statistical Meetings (SFASA Student Travel Award winner)  Berkeley-Stanford Econometrics Jamboree  Atlantic Causal Inference Conference (Thomas R. Ten Have Poster Award runner up)  Multi-level balancing weights for multi-site observational studies  Society for Research on Educational Effectiveness  The augmented synthetic control method  2018 European Winter Meeting of the Econometric Society  Matrix constraints and multi-task learning for covariate balance  7th Causal Inference Workshop at UAI	March 2021 March 2021 September 2020 August 2020 August 2020 November 2019 May 2019  March 2019  December 2018  August 2018
AWARDS AND HONORS	
American Statistical Association Social Statistics Section Student Paper Award	2021
American Statistical Association, San Francisco Bay Area Chapter, Student Travel A	ward 2020
Department fellowship, Department of Statistics, U.C. Berkeley  Two years of funding through RTG grant: Advancing Machine Learning - Causality and Interpre	2018 etability
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	of Statistics	Graduate	Student	Instructor
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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 Journal of the American Statistical Association, Econometrica, Biometrika, Political Analysis, Annals of Applied Statistics, Statistics in Medicine, Statistics and Public Policy, Population Health Metrics, INFORMS Journal on Data Science, Journal of Educational and Behavioral Statistics, Journal of Causal Inference, and Journal of Applied Econometrics

## 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

 $Data\ Science\ Intern$