# Jason Poulos

### CONTACT Department of Health Care Policy

Harvard Medical School 180 Longwood Avenue Boston, MA 02115-5821

# ☑ poulos@hcp.med.harvard.edu

🥱 jasonvpoulos.com

**Q** github.com/jvpoulos

# Professional

#### Harvard Medical School, Boston, MA

Appointments Postdoctoral Fellow in Data Science, Department of Health Care Policy, 2021 –

### Duke University and SAMSI, Durham, NC

Postdoctoral Associate, Department of Statistical Science, 2019 – 2021 Postdoctoral Associate, SAMSI, 2019 – 2021

#### **EDUCATION**

# University of California, Berkeley

Ph.D., Political Science with a Designated Emphasis in Computational Science and Engineering, 2019

M.A., Political Science, 2014

### University of Massachusetts, Amherst

B.A., Economics, 2008 (Phi Beta Kappa)

### Refereed Articles

Jason Poulos and Shuxi Zeng (2021+). "RNN-Based Counterfactual Prediction, with an Application to Homestead Policy and Public Schooling." Accepted, *Journal of the Royal Statistical Society, Series C.* 

Jason Poulos (2021+). "Amnesty Policy and Elite Persistence in the Postbellum South: Evidence from a Regression Discontinuity Design." Accepted, *Journal of Historical Political Economy*, 1(3).

Jason Poulos and Rafael Valle (2021). "Character-Based Handwritten Text Transcription with Attention Networks." Neural Computing & Applications.

Kellie Ottoboni and Jason Poulos (2020). "Estimating Population Average Treatment Effects from Experiments with Noncompliance." *Journal of Causal Inference*, 8(1): 108-130.

Jason Poulos (2019). "Land Lotteries, Long-term Wealth, and Political Selection." *Public Choice*, 178(1): 217-230.

Jason Poulos and Rafael Valle (2018). "Missing Data Imputation for Supervised Learning." Applied Artificial Intelligence 32(2): 186-196.

## Manuscripts Under Review

"Adversarial Machine Learning: Bayesian Perspectives" (with David Rios Insua, Roi Naveiro, and Victor Gallego). Revisions requested, *Journal of the American Statistical Association – Reviews.* arXiv:2003.03546.

"Are Deep Learning Models Superior for Missing Data Imputation in Large Surveys? Evidence from an Empirical Comparison" (with Zhenhua Wang, Olanrewaju Akande, and Fan Li). arXiv:2103.09316.

"Retrospective Causal Inference via Matrix Completion, with an Evaluation of the Effect of European Integration on Labour Market Outcomes" (with Andrea Albanese, Fan Li, and Andrea Mercatanti). arXiv:2106.00788.

"State-Building through Public Land Disposal? An Application of Matrix Completion for Counterfactual Prediction." arXiv:1903.08028.

# Professional Service

Conference Reviewer: NeurIPS Workshop on Machine Learning and the Physical Sciences (2019, 2020); Uncertainty in Artificial Intelligence (UAI, 2021)

**Book Reviewer:** Springer Mathematics

Journal Reviewer: Applied Artificial Intelligence; Distributed and Parallel Databases; Economics & Politics; European Journal of Operational Research; Frontiers in Big Data – Data Mining and Management; Journal of Applied Econometrics; Statistics and Public Policy

# GRANTS AND FELLOWSHIPS

PI, National Science Foundation Frontera Startup Allocation: "RNN-Based Counterfactual Prediction on High-Dimensional Longitudinal Health Data" (SES20001), 2020-2021

PI, National Science Foundation XSEDE Startup Allocation: "RNN-Based Counterfactual Time-Series Prediction" (SES180010), 2018-2019, 2020-2021 (\$2,172)

Berkeley Empirical Legal Studies Graduate Fellowship, University of California, Berkeley, School of Law, 2016-2017 (\$1,000)

National Science Foundation Graduate Research Fellowship, 2013-2018

# CONFERENCE & WORKSHOP PRESENTATIONS

Advances in Interdisciplinary Statistics and Combinatorics (AISC, 2021) Joint Statistical Meetings (JSM, 2021)

"Slavery & Its Legacies Symposium" (USC Bedrosian Center, 2021)

Society for Political Methodology (PolMeth, 2020; PolMeth Europe, 2021)

"Big Data Meets Survey Science" (BigSurv20, 2020)

"Data Science, Statistics & Visualization" (DSSV, 2020)

American Political Science Association (APSA, 2014\*, 2015, 2018†)

Midwest Political Science Association (MPSA, 2018)

\*poster presentation: †discussant

OTHER Research Support Associate, Department of Political Science, **MIT**, 2011 - 2013
Research Assistant, Department of Economics, **Harvard University**, 2010 - 2011
EXPERIENCE Research Assistant, Harvard Kennedy School, **Harvard University**, 2009 - 2010

TECHNICAL Languages: R (expert); Python (moderate); bash (moderate); C/C++/UPC (novice)

SKILLS VCS: git + github; SVN

Frameworks & libraries: TensorFlow; Keras; scikit-learn; Open MPI

Operating systems: Linux (CentOS; Ubuntu)