Jason Poulos

CONTACT

Department of Health Care Policy
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PROFESSIONAL APPOINTMENTS

Harvard Medical School, Boston, MA
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).

"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: *Alexandria Engineering Journal*; *Applied Artificial Intelligence*; *Applied Sciences*; *Distributed and Parallel Databases*; *Economics & Politics*; *European Journal of Operational Research*; *Frontiers in Big Data – Data Mining and Management*; *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)
"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 Professional Experience

Research Support Associate, Department of Political Science, **MIT**, 2011 - 2013

Research Assistant, Department of Economics, **Harvard University**, 2010 - 2011
Research Assistant, Harvard Kennedy School, **Harvard University**, 2009 - 2010

TECHNICAL SKILLS

Languages: R (expert); Python (moderate); bash (moderate); C/C++/UPC (novice)
VCS: git + github; SVN
Frameworks & libraries: TensorFlow; Keras; scikit-learn; Open MPI
Operating systems: Linux (CentOS; Ubuntu)