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
⭘ github.com/jvpoulos

POSTDOCTORAL
TRAINING

Harvard Medical School, Boston, MA
Postdoctoral Fellow in Data Science, Department of Health Care Policy, 2021 –

Statistical and Applied Mathematical Sciences Institute (SAMSI) and **Duke University**, Durham, NC
Postdoctoral Associate, 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 (Phi Beta Kappa)

PEER-REVIEWED
ARTICLES

David Rios Insua, Roi Naveiro, Víctor Gallego, and **Jason Poulos** (2023). "Adversarial Machine Learning: Bayesian Perspectives." *Journal of the American Statistical Association – Reviews.* arXiv:2003.03546.

Zhenhua Wang, Olanrewaju Akande, **Jason Poulos**, and Fan Li (2022). "Are Deep Learning Models Superior for Missing Data Imputation in Surveys? Evidence from an Empirical Comparison." *Survey Methodology*, 48(2): 375-399. arXiv:2103.09316.

Jason Poulos and Shuxi Zeng (2021). "RNN-Based Counterfactual Prediction, with an Application to Homestead Policy and Public Schooling." *Journal of the Royal Statistical Society, Series C*, 70(4): 1124-1139. arXiv:1712.03553.

Jason Poulos and Rafael Valle (2021). "Character-Based Handwritten Text Transcription with Attention Networks." *Neural Computing & Applications*, 33(16): 10563-10573. arXiv:1712.04046.

Kellie Ottoboni and **Jason Poulos** (2020). "Estimating Population Average Treatment Effects from Experiments with Noncompliance." *Journal of Causal Inference*, 8(1): 108-130. arXiv:1901.02991.

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. arXiv:1610.09075.

MANUSCRIPTS UNDER REVIEW	"Targeted Learning in Observational Studies with Multi-Level Treatments: An Evaluation of Antipsychotic Drug Treatment Safety" (with Marcela Horvitz-Lennon, Katya Zelevinsky, Thomas Huijskens, Pooja Tyagi, Jiaju Yan, Jordi Diaz, Tudor Cristea-Platon, and Sharon-Lise Normand). Revise & resubmit, *Statistics in Medicine.* arXiv:2206.15367.
	"State-Building through Public Land Disposal? An Application of Matrix Completion for Counterfactual Prediction." Revise & resubmit, *Statistics and Public Policy.* arXiv:1903.08028.
EDITOR-REVIEWED ARTICLES	**Jason Poulos** (2023). "Gender Gaps in Frontier Entrepreneurship? Evidence from 1901 Oklahoma Land Lottery Winners." Special issue on "The Development of the American West," *Journal of Historical Political Economy*, 2(4): 611-634. arXiv:2206.14922.
	Jason Poulos (2021). "Amnesty Policy and Elite Persistence in the Postbellum South: Evidence from a Regression Discontinuity Design." Special issue on "Slavery and its Legacies," *Journal of Historical Political Economy*, 1(3): 353-375. arXiv:2103.14220.
INVITED PRESENTATIONS	Summer School on Modern Techniques in Survey Sampling, University of Ottawa, July 2022
	Department of Mathematics, Université du Québec à Montréal, February 2022
	Statistical Methods for Computational Advertising, Banff International Research Station, October 2021
CONFERENCE PRESENTATIONS	Causal Data Science Meeting (CDSM; 2021, 2022)
	RAND Center for Causal Inference Symposium (2022)
	Joint Statistical Meetings (JSM; 2021, 2022)
	Political Institutions and Political Economy Collaborative, Bedrosian Center, University of Southern California (2021, 2022)
	Society for Political Methodology (PolMeth; 2020, 2021; Europe, 2021, 2022; Asia, 2022)
	Eastern North American Region International Biometric Society (ENAR; 2022)
	Online Causal Inference Seminar (OCIS; 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*; †*discussant*; ‡*paper & discussant*

GRANTS AND FELLOWSHIPS	National Science Foundation Frontera Startup Allocation: "RNN-Based Counterfactual Prediction on High-Dimensional Longitudinal Health Data" (SES20001), 2020-2021
	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
TEACHING & MENTORING	Graduate Student Instructor, Department of Political Science, University of California, Berkeley, 2017 - 2019
	Intro. to American Politics (undergrad), spring 2017 and spring 2018
	Intro. to Empirical Analysis & Quantitative Methods (undergrad), fall 2018
	Research Mentor, Undergraduate Research Apprentice Program (URAP), University of California, Berkeley, fall 2016 and spring 2017
PROFESSIONAL SERVICE	<u>Book Reviewer:</u> Springer Mathematics
	<u>Conference Reviewer:</u> Artificial Intelligence and Statistics (AISTATS; 2022); Machine Learning for Health (ML4H; 2021, 2022); Neural Information Processing Systems (NeurIPS): Workshop on Machine Learning and the Physical Sciences (2019, 2020); Uncertainty in Artificial Intelligence (UAI; 2021)
	<u>Journal Reviewer:</u> (> 1 papers) *Alexandria Engineering Journal*; *Applied Artificial Intelligence* (3); *Applied Sciences* (2); *Applied Stochastic Models in Business and Industry*; *Distributed and Parallel Databases*; *Economics & Politics*; *European Journal of Operational Research*; *Frontiers in Big Data – Data Mining and Management* (2); *GigaScience*; *Journal of Applied Econometrics*; *Journal of the Royal Statistical Society: Series C*; *PLOS ONE*; *PLOS Neglected Tropical Diseases*; *Sensors*; *Statistical Methods & Applications*; *Statistics and Public Policy*
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   <u>Languages:</u> R (expert); Python (moderate); bash (moderate); C/C++/UPC (novice)

<u>VCS:</u> git + github; SVN

<u>Frameworks & libraries:</u> TensorFlow; Keras; scikit-learn; Open MPI

<u>Operating systems:</u> Linux (CentOS; Ubuntu)

References

Prof. Sean Gailmard
(Dissertation chair)
Department of Political Science
University of California, Berkeley
☎ 510-642-4677
✉ gailmard@berkeley.edu

Prof. Sharon-Lise Normand
(Postdoc advisor)
Department of Health Care Policy
Harvard Medical School
☎ 617-432-3260
✉ sharon@hcp.med.harvard.edu

Prof. David Banks
(Postdoc mentor)
Department of Statistical Science
Duke University
☎ 919-684-3743
✉ dlbanks@stat.duke.edu