

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 –
- 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
- University of Massachusetts, Amherst**
B.A., Economics, 2008 (Phi Beta Kappa)
- PEER-REVIEWED ARTICLES** David Rios Insua, Roi Naveiro, Víctor Gallego, and **Jason Poulos** (2022+). “Adversarial Machine Learning: Bayesian Perspectives.” Minor revisions requested, *Journal of the American Statistical Association – Reviews*. [arXiv:2003.03546](https://arxiv.org/abs/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.” Forthcoming, *Survey Methodology*. [arXiv:2103.09316](https://arxiv.org/abs/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](https://arxiv.org/abs/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](https://arxiv.org/abs/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](https://arxiv.org/abs/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](https://arxiv.org/abs/1610.09075).

EDITOR- REVIEWED ARTICLES	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,” <i>Journal of Historical Political Economy</i> , 1(3): 353-375. arXiv:2103.14220 .
MANUSCRIPTS UNDER REVIEW	<p>“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). arXiv:2206.15367.</p> <p>“State-Building through Public Land Disposal? An Application of Matrix Completion for Counterfactual Prediction.” Revise & resubmit, <i>Statistics and Public Policy</i>. arXiv:1903.08028.</p> <p>“Gender Gaps in Frontier Entrepreneurship? Evidence from 1901 Oklahoma Land Lottery Winners.” Invited submission to <i>Journal of Historical Political Economy</i>. arXiv:2206.14922.</p>
INVITED PRESENTATIONS	<p>Summer School on Modern Techniques in Survey Sampling, University of Ottawa, July 2022</p> <p>Political Institutions and Political Economy Collaborative, Bedrosian Center, University of Southern California, April 2021 and May 2022</p> <p>Department of Mathematics, Université du Québec à Montréal, February 2022</p> <p>Statistical Methods for Computational Advertising, Banff International Research Station, October 2021</p>
CONFERENCE PRESENTATIONS	<p>Causal Data Science Meeting (CDSM; 2021, 2022)</p> <p>RAND Center for Causal Inference Symposium (2022)</p> <p>Joint Statistical Meetings (JSM; 2021, 2022)</p> <p>Society for Political Methodology (PolMeth; 2020, 2021; Europe, 2021, 2022; Asia, 2022)</p> <p>Eastern North American Region International Biometric Society (ENAR; 2022)</p> <p>Online Causal Inference Seminar (OCIS; 2021[†])</p> <p>Big Data Meets Survey Science (BigSurv20; 2020)</p> <p>Data Science, Statistics & Visualization (DSSV; 2020)</p> <p>American Political Science Association (APSA; 2014[*], 2015, 2018[‡])</p> <p>Midwest Political Science Association (MPSA; 2018)</p> <p>[*]poster; [†]discussant; [‡]paper & discussant</p>

PROFESSIONAL SERVICE	<p><u>Book Reviewer</u>: Springer Mathematics</p> <p><u>Conference Reviewer</u>: Artificial Intelligence and Statistics (AISTATS; 2023); 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)</p> <p><u>Journal Reviewer</u>: (> 1 papers) <i>Applied Artificial Intelligence</i> (2); <i>Applied Sciences</i> (2); <i>Distributed and Parallel Databases</i>; <i>Economics & Politics</i>; <i>European Journal of Operational Research</i>; <i>Frontiers in Big Data – Data Mining and Management</i> (2); <i>GigaScience</i>; <i>Journal of Applied Econometrics</i>; <i>Journal of the Royal Statistical Society: Series C</i>; <i>PLOS ONE</i>; <i>PLOS Neglected Tropical Diseases</i>; <i>Sensors</i>; <i>Statistical Methods & Applications</i>; <i>Statistics and Public Policy</i></p>
GRANTS AND FELLOWSHIPS	<p>National Science Foundation Frontera Startup Allocation: “RNN-Based Counterfactual Prediction on High-Dimensional Longitudinal Health Data” (SES20001), 2020-2021</p> <p>National Science Foundation XSEDE Startup Allocation: “RNN-Based Counterfactual Time-Series Prediction” (SES180010), 2018-2019, 2020-2021 (\$2,172)</p> <p>Berkeley Empirical Legal Studies Graduate Fellowship, University of California, Berkeley, School of Law, 2016-2017 (\$1,000)</p> <p>National Science Foundation Graduate Research Fellowship, 2013-2018</p>
TEACHING INTERESTS	Applied Machine Learning; Causal Inference; Scientific Programming
TEACHING & MENTORING	<p>Graduate Student Instructor, Department of Political Science, University of California, Berkeley, 2017 - 2019</p> <p>Introduction to American Politics (undergraduate) with Prof. Paul Pierson, spring 2017 and spring 2018</p> <p>Introduction to Empirical Analysis & Quantitative Methods (undergraduate) with Prof. Andrew Little, fall 2018</p> <p>Research Mentor, Undergraduate Research Apprentice Program (URAP), University of California, Berkeley, fall 2016 and spring 2017</p>
OTHER PROFESSIONAL EXPERIENCE	<p>Research Support Associate, Department of Political Science, MIT, 2011 - 2013</p> <p>Research Assistant, Department of Economics, Harvard University, 2010 - 2011</p> <p>Research Assistant, Harvard Kennedy School, Harvard University, 2009 - 2010</p>
TECHNICAL SKILLS	<u>Languages</u> : 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)

REFERENCES

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

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

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