Daniel Ebanks

Harvard University
Institute for Quantitative Social Science

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Education

California Institute of Technology
Ph.D. Candidate, Social Sciences   (September 2023)
M.S., Social Sciences   (June 2020)
Thesis: Unexpected Partisan Unity Among Congressional Leaders and
Legislators Using New Latent Variable Estimation Techniques and Frameworks
Dissertation Committee: Jonathan N. Katz (*Chair*), R. Michael Alvarez, Gary King,
Bob Sherman

Princeton University   (May 2015)
A.B., School of Public and International Affairs
Thesis: European Integration through Political Mobilization: Is it Still Possible?

Academic Experience

Intitute for Quantitative Social Science, Harvard University
Postdoctoral Fellow (September 2023-Present)

Professional Experience

Nvidia
PhD Research Intern (May-December 2022)

Federal Reserve, Board of Governors
Senior Research Assistant (October 2016-August 2018)
Research Assistant (June 2015- October 2016)
Student Intern (June-August 2014)

Bureau of Foreign Relations, Senate of the French Republic
Student Intern (June-August 2013)

Peer-Reviewed Articles

Analyzing Political Text at Scale with Online Tensor LDA. *R&R
at Political Analysis.* (with Sara Kangaslahti, Jean Kossaifi, R. Michael Alvarez,
Anima Anandkumar)

**Legislative Communication and Power: Measuring Leadership
from Social Media Data.** *Forthcoming at European Political Science
Review.* (with Hao Yan, R. Michael Alvarez, Sanmay Das, Betsy Sinclair)
DOI: 10.1017/S1755773924000146

**Climate change free riders: Identifying free riding among Americans,
motivating more collective sustainable behavior.** *Scientific Reports, 2024.*
(with Beatrice Magistro, Cecilia Abramson, Ramit Debnath, R. Michael Alvarez)
DOI: https://doi.org/10.1038/s41598-024-57042-w

**Persuadable voters decided the 2022 midterm: Abortion rights and issues-based
frameworks for elections.** *PLOS-ONE, 2023.* (with Claudia Kann, Jacob Morrier,
R. Michael Alvarez). DOI: https://doi.org/10.1371/journal.pone.0294047

Why don't Americans trust university researchers and why it matters for climate change. *PLOS-Climate, 2023.* (with R. Michael Alvarez, Ramit Debnath) DOI: https://doi.org/10.1371/journal.pclm.0000147

Do fossil fuel firms reframe online climate and sustainability communication? A data-driven analysis. *npj Climate Action, 2023.* (with Ramit Debnath, Kamiar Mohaddes, Thomas Roulet, R. Michael Alvarez) DOI: https://doi.org/10.1038/s44168-023-00086-x

Working Papers

Topic Models are Statistically Inconsistent, More Biased with More Data, and Substantively Misleading: Evidence, Solutions, and Applications *Job Market Paper.* (with Sara Kangslanthi)

How American Politics Ensures Electoral Accountability in Congress *Working Paper.* (with Jonathan N. Katz, Gary King) Paper: https://gking.harvard.edu/acc

If a Statistical Model Predicts That Common Events Should Occur Only Once in 10,000 Elections, Maybe it's the Wrong Model *Working Paper.* (with Jonathan N. Katz, Gary King) Paper: https://gking.harvard.edu/10k

Improving Joint Sentiment-Topic Modeling for Studying Political Text: A Tensor Decomposition Approach. *Working Paper.* (with R.Michael Alvarez, Nick Adams-Cohen)

Ideological Feature Extraction *Working Paper.* (with R.Michael Alvarez, Betsy Sinclair, Joon Park, Bojan Tonguz)

Eroding Trust in Democracy: How Social Media Attacks on Election Officials in 2020 Undermined American Election Institutions *Under Review.* (with Sarah Hashah, Sreemanti Dey, R. Michael Alvarez)

Pre-Registered Studies

How Partisan Mediation Biases Trust in Scientists: Conjoint Evidence and Implications for Climate Change *Working Paper.* (with Ramit Debnath, R. Michael Alvarez) DOI: https://osf.io/8ufdv

Calibration of Polarized Trust in Scientists *Working Paper.* (with Ramit Debnath, R. Michael Alvarez) DOI: https://doi.org/10.17605/OSF.IO/WF2SX

Research Interests

American Politics, Political Methodology, Election Forecasting, Congress, Natural Language Processing, Latent Variable Models, Scalable Tensor, M Methods, Machine Learning, Causal Inference, Congressional Elections, Bayesian Statistics, Text-as-data methods, Climate Politics

Other Research Articles

Fedwire Funds Service: Payments, Balances, and Available Liquidity *Finance and Economics Discussion Series. 2021.* (Anton Badev, Lauren Clark, Jeffrey Marquardt, David Mills) DOI: https://doi.org/10.17016/FEDS.2021.070

The Network of Large-Value Loans in the U.S. *Working Paper.* (with Anton Badev)

Conferences	• Presenter: MPSA, Paper Session, 2021,2022, 2023, 2024 • Presenter: APSA, Paper Session, 2022, 2023, 2024 • Invited Talk: Political Methodology, Paper Session, 2022 • Presenter: Political Methodology, Poster Session, 2021, 2023 • Invited Talk: Texas Political Methods Meeting, February 2024 • Invited Talk: UCLA, Biostatistics, April 2022 • Invited Talk: Political Networks, Paper Session, July 2021 • Invited Talk: Political Methodology Europe, Panel Session, March 2021 • Presenter: HOW Series on Payments, Federal Reserve, November 2017 • Invited Talk: Consortium for Data Analytics in Risk, UC Berkeley, November 2016

Awards

Resnick Sustainability Institute Scholar
Research Fellowship in the Alvarez Lab, 2021-2023 ($45,000 per year)
Google Cloud Platform Award for the Alvarez Lab, $50,000, 2021-2023

IST/AWS AI4Science Cloud Credit Programs
Political Polarization and Novel Methods for Large Administrative Data, $5,000, 2022

Divisional Award for Excellence in Teaching; Advanced R
Reserve Bank Operations and Payments Systems, 2015

Teaching

California Institute of Technology
Teaching Assistant, Graduate Advanced Methods, Fall 2022
Teaching Assistant, History of U.S. Budgetary Politics II, Spring 2020, 2021
Teaching Assistant, History of U.S. Budgetary Politics I, Winter 2020, 2021
Teaching Assistant, Political Game Theory, Fall 2019

Federal Reserve, Board of Governors
Co-Instructor, Micro-econometrics via Simulations Summer Course, 2016-2017
Teaching Assistant, Micro-econometrics via Simulations Summer Course, 2015

Languages & Software

English (native), French (advanced)
Proficient in R, Stan, Matlab, Python, Stata, LaTeX, AWS and GCP Cloud Computing, Pytorch, Tensorflow, TensorLy
Familiar with FORTRAN, C++, SQL, SAS, SPSS

Software: TensorLy LDA: https://tensorly.org/tlda/dev/index.html
ElectIt, Election Forecasting Software, *Forthcoming*, with (Jonathan Katz, Gary King, Dominic Skinnion, Allison Xu)

Extracurricular

Graduate Student Council, Director for Humanities and Social Science (2021-2022)
Graduate Student Council, Director for Humanities and Social Science (2020-2021)
Federal Reserve LGBTQA+ ERG, Executive Committee (2017 - 2018)
President, Princeton Running Club (2013-2015)

Professional Memberships

APSA, 2020-Present
Society for Political Methodology, 2020-Present
MPSA 2020-Present

Peer Reviewer

Political Analysis, Journal of Machine Learning Research

References

R. Michael Alvarez, Jonathan N. Katz, Gary King