

ACADEMIC POSITIONS	American University	Washington, DC
	Assistant Professor of Computer Science	2024 -
	Faculty Fellow, Center for Data Science	
	Faculty Affiliate, Center for Security, Innovation, and New Technology	
	New York University's Center for Social Media and Politics	New York, NY
EDUCATION	Faculty Research Affiliate	2024 -
	Postdoctoral Fellow	2021 - 2024
	University of Michigan	Ann Arbor, MI
	<i>Ph.D. in Political Science and Scientific Computing</i>	2015 - 2021
	<i>M.A. in Statistics</i>	2016 - 2021
PUBLICATIONS	University of Chicago	Chicago, IL
	<i>B.A. in Political Science (with honors) and Statistics</i>	2010 - 2014
	1. Patrick Y. Wu. 2025. "Using Semantically Unrelated and Opposite Terms for In-Context Learning: A Case Study in Identifying Political Aversion in Tweets." Forthcoming in the <i>Proceedings of the ACM Web Science Conference</i> .	
	2. Rupak Sarkar, Alexander Hoyle, Patrick Y. Wu, Kristina Miler, and Philip Resnik. 2025. "PairScale: Analyzing Attitude Change with Pairwise Comparisons." Forthcoming in the <i>Findings of the Association for Computational Linguistics: NAACL 2025</i> .	
	3. Patrick Y. Wu, Jonathan Nagler, Joshua A. Tucker, and Solomon Messing. 2024. "Concept-Guided Chain-of-Thought Prompting for Pairwise Comparison Scoring of Texts with Large Language Models." <i>2024 IEEE International Conference on Big Data (BigData)</i> . [Paper]	
IN SUBMISSION	4. Nicole Wu* and Patrick Y. Wu*. 2024. "Surveying the Impact of Generative Artificial Intelligence on Political Science Education." <i>PS: Political Science & Politics</i> . (* denotes equal contribution) [Paper]	
	5. Patrick Y. Wu, Richard Bonneau, Joshua A. Tucker, and Jonathan Nagler. 2022. "Dictionary-Assisted Supervised Contrastive Learning." <i>Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP)</i> . [Paper]	
	6. Patrick Y. Wu and Walter R. Mebane, Jr. 2022. "MARMOT: A Deep Learning Framework for Constructing Multimodal Representations for Vision-and-Language Tasks." <i>Computational Communication Research</i> 4(1): 275-332. [Paper]	
	1. Patrick Y. Wu, Jonathan Nagler, Joshua A. Tucker, and Solomon Messing. 2024. "Large Language Models Can Be Used to Estimate the Latent Positions of Politicians."	

WORKING PAPERS AND PROJECTS

1. Haohan Chen, Zhanna Terechshenko, Patrick Y. Wu, Richard Bonneau, Jonathan Nagler, and Joshua A. Tucker. 2022. “Detecting Political Sectarianism on Social Media: A Deep Learning Classifier with Application to 2020-2022 Tweets.”
2. Walter R. Mebane, Jr., Diogo Ferrari, Kevin McAlister, and Patrick Y. Wu. 2022. “Measuring Election Frauds.” [\[Working Paper\]](#)
3. Patrick Y. Wu, Walter R. Mebane, Jr., Logan Woods, Joseph Klaver, and Preston Due. 2019. “Party Words: Partisan Associations from Word Embeddings of Twitter Users’ Bios.” [\[Working Paper\]](#)
4. Walter R. Mebane, Jr., Patrick Y. Wu, Logan Woods, Joseph Klaver, Alejandro Pineda, and Blake Miller. 2018. “Diverse Election Experiences Reported Without Bias: Observing Election Incidents in the United States via Twitter.” [\[Working Paper\]](#)
5. Diogo Ferrari, Robert Franzese, Hayden Jackson, ByungKoo Kim, Wooseok Kim, and Patrick Y. Wu. 2020. “The Role of Economic Decline and Malaise in the Rise of Extreme Nationalist Populism.”

INVITED PRESENTATIONS

- Keynote speaker at EvalTech, Inter-American Development (2025)
- QTM Speaker Series, Department of Quantitative Theory and Methods at Emory University (2024)
- Workshop on Natural Language Processing, Summer Institute in Computational Social Science at New York University (2023)
- “Linking Online Activity to Offline Behavior,” IDEaS Workshop at Carnegie Mellon University (2023)

TEACHING

Graduate

- Object-Oriented Programming, American University (cross-listed with undergraduate) (Winter 2025)
- Natural Language Processing and Text as Data, American University (cross-listed with undergraduate) (Fall 2024)
- Machine Learning: Applications in Social Science Research, ICPSR Summer Program in Quantitative Methods (with Christopher Hare as TA) (Summer 2020)
- Statistical Methods in Political Research II, University of Michigan (with Rocio Titunik as TA and Kevin Quinn as grader) (Winter 2018, Winter 2019, Winter 2020)
- Mathematics for Political Scientists, University of Michigan (with Iain Osgood as TA) (Fall 2016, Fall 2017)

Undergraduate

- Object-Oriented Programming, American University (cross-listed with graduate) (Winter 2025)
- Natural Language Processing and Text as Data, American University (cross-listed with graduate) (Fall 2024)
- Introduction to Computational Political Science, University of Michigan (with Yuki Shiraito as grader) (Winter 2021)
- Comparative Analysis of Government Institutions, University of Michigan (with George Tsebelis as grader) (Fall 2019)

SERVICE	<ul style="list-style-type: none"> • Editorial Board, <i>Social Science Computer Review</i> (2025 -) • Coordinator, Interdisciplinary Seminar in Social Science Methodology, University of Michigan (2019 - 2021) • Coordinator, Statistical Learning Workshop, University of Michigan (2018 - 2019) • Manuscript Referee: ACL Rolling Review (Ethics Reviewer), <i>ACL Student Research Workshop</i>, <i>American Journal of Political Science</i>, <i>Computational Communication Research</i>, <i>Harvard Data Science Review</i>, <i>Journal of Health Communication</i>, <i>PNAS Nexus</i>, <i>Political Analysis</i>, <i>Political Communication</i>, <i>PS: Political Science and Politics</i>, <i>Political Science Research & Methods</i>, <i>Public Opinion Quarterly</i>, <i>Social Science Computer Review</i>, <i>Workshop on Images in Online Political Communication</i> (PhoMemes) • Grant Reviewer: NSF, SNSF
AWARDS AND HONORS	<ul style="list-style-type: none"> • Mellon Competition, \$1,900, American University (2024) • MICDE Fellowship, \$4,000, Michigan Institute for Computational Discovery and Engineering (2020) • Best Poster, UMTweetCon (2019) • Best Paper, UMTweetCon (2019) • Roy Pierce Scholars Fund, \$6,000, University of Michigan Institute for Social Research Center for Political Studies (2018) • Honorable Mention, NSF Graduate Research Fellowships Program (2017) • Dean's List, University of Chicago (2014)
MEDIA	<ol style="list-style-type: none"> 1. "For Trump's Backers in Congress, 'Devil Terms' Help Rally Voters." <i>New York Times</i>. 2022. Assisted with text analysis in the article. 2. "This is how you file a legal election complaint." <i>Monkey Cage</i>. 2016. Author.
SOFTWARE	<ol style="list-style-type: none"> 1. CGCoT: Python implementation of concept-guided chain-of-thought (with Jonathan Nagler, Joshua A. Tucker, and Solomon Messing) [Code] 2. DASCL: Python implementation of the dictionary-assisted supervised contrastive learning framework (with Richard Bonneau, Joshua A. Tucker, and Jonathan Nagler) [Code] 3. eforensics: R package to estimate fraud in elections using finite mixture models (with Diogo Ferrari, Kevin McAlister, and Walter R. Mebane, Jr.) [Code] 4. MARMOT: Python implementation to calculate joint image-text representations that may be missing a modality (with Walter R. Mebane, Jr.) [Code] 5. PartisanAssociations: Python implementation of calculating partisan associations of Twitter users using their user bios (with Walter R. Mebane, Jr., Logan Woods, Joseph Klaver, and Preston Due) [Code]