Yi-Jyun Lin

(886)928645680

linyiyi26@rsprc.ntu.edu.tw

Education

University of Nevada, Reno, U.S.A. PhD, Political Science (August 2020)

National Taipei University, Taiwan MA, Public Policy and Administration (May 2007)

Tunghai University, Taiwan BA, Political Science (May 2004)

Advanced Training

AI Engineer Training Program, Taiwan (2022). Training: Machine Learning/Deep Learning, Computer Version, Python Django Web and Database Building.

Computational Social Science Methods, Summer Institute in Computational Social Science, Rutgers University (2021).

Advanced Quantitative Methods, Institute for Political Methodology, Taiwan (2007 & 2016).

Work & Research Experience

Postdoctoral Research Associate, School of Government & Public Policy, University of Arizona (Fall, 2022~).

Researcher, Risk Society and Policy Research Center (RSPRC), National Taiwan University, Taiwan.

• Project: Task Force on Climate-related Financial Disclosures (TCFD) & Science-based emissions reduction target (SBTs): 1) Database design; 2) Modeling of corporates' annual revenue and default risks probability given the climate action for Net-Zero emission in 2050.

Data Analysis Consultant, University of Nevada, Reno (2018-2020)

- Providing training and consultation for data analysis
- statistical analysis workshops & talks 1) R programming for Postdoctoral scholars; 2) Data analysis & management using Stata and SPSS; 3) Spatial analysis with R and GIS

Graduate Research Assistant, University of Nevada, Reno (2013-2017)

- Professor Robert Ostergard. 1) Political Violence in African Countries: data analysis
- Professor Xiaoyu Pu. 1) Data analyses.
- Professor Susanne Martin. 1) Timing of Political Insurgencies: literature review, data collection and data analysis.
- Professor Derek Kauneckis. 1) Data management.

• Professor Bozena Welborne. 1) Women's Leadership and Political Rights (MENA countries): data collection. 2) Foreign aid in African countries.

Research Assistant, Institute of Political Science, Academic Sinica, Taiwan (2007-2010)

• Professor Fang-Yi Chiou. 1) Legislative Gridlock: data collection and analyses. 2) Provide analytical training for new-hire research assistants.

Teaching Experience

Graduate Teaching Assistant, Department of Political Science, University of Nevada, Reno (2013-2014)

- Research Methods in Political Science [PSC780]
- Advanced Research Methods in Political Science [PSC782]
- Stata workshop [PSC782]

Publication & Working Paper

- Kelling, Claire & Lin, Yijyun. (2020). Analysis of Conflict Diffusion over Continuous Space. In: Deutschmann E., Lorenz J., Nardin L., Natalini D., Wilhelm A. (eds) *Computational Conflict Research*. Computational Social Science. Springer.
- Yijyun Lin. Tackling Backfire Effects of State Capacity and Democracy on Climate-Induced Vulnerability with Machine Learning Approach (to be submitted to the Journal of Peace Research).
- A Comparison of Mediation Analysis in Classic Structural Equation Models, Counterfactual Approach, and Directed Acyclic Graph (with Prof. Bollen, Kenneth; work in progress).
- Multilingual Protest Event Detection, CASE@EMNLP 2022 (with Dr. Ali Hürriyetoğlu et al.).

AI/ML Application in Climate Change/Misinformation Related Projects

- Climate Change, Socio-Economic Vulnerability and Violent Crimes in the U.S. (with Prof. Markus Kemmelmeier, University of Nevada, Reno).
- Application of Responsible AI in Climate Change Mitigation during the Post-COVID19 Pandemic Recovery (with Prof. Zaitchik, Johns Hopkins; Prof. Dogan, UNC; Prof. Pricope, UNC).

Conference (selection)

- Lin, YiJyun. "Exploring Causal Paths Linking Climate Variability to Civil Conflicts: An Application of Machine Learning Methods." 2019 TextXD: Text Analysis Across Domains, UC Berkeley.
- Lin, Yi-Jyun. "Identifying Pathways Linking Climatic Vulnerabilities to Civil Conflict" 2019 PolMeth, Massachusetts Institute of Technology (MIT), Boston.
- Lin, Yi-Jyun. "Quantifying Spatiotemporal Effects of Climate on Violent Conflicts: Democracy and Institutions in the Making of Reversal of Resource Scarcity" 2019 Asia Political Methodology Meeting, Kyoto, Japan.
- Lin, Yi-Jyun. "Identifying Impacts of Climate Change on Social Conflicts" 2018 Vision in Methodology, Ohio State University.
- Lin, Yi-Jyun. "Is it a Misplaced Causality or Unbearable Lightness of Climate Change? A Global Analysis of Climate-Variability-Social Conflict Nexus" 2017 Behavioral Models of Politics Conference & Workshop, Duke University.

- Lin, Yi-Jyun. "The Challenges and Opportunities of Analyzing Large Climate Data." 2016 NSF Data Science Workshop, University of Washington, Seattle, Washington.
- Lin, Yi-Jyun. "Methodological Issues of Using Big Data in Political Science." 2015 NSF Data Science Workshop, University of Washington, Seattle, Washington.
- Lin, Yi-Jyun. "Misplaced Causality or Unbearable Lightness of Climate Change: How might climate variability exacerbate social conflict in Africa?" 2015 Midwest Political Science Association, Chicago, IL.

Computational and Software Skills

Statistical Analysis with R, Stata & Python Machine Learning Social Media as a Research Tool Spatial Analysis with R & ArcGIS Computational Social Science Methods (text data analysis and topic modeling) MySQL & XAMPP Web Design with HTML & CSS

Service & Affiliation

- U.S. National Academy of Sciences, Engineering, and Medicine's program "Engaging a Trusted Scientific Network in Southeast Asia to Counter Misleading Information about Biological Threats."
- Neuromatch Academy: Computational Neuroscience: I mentor for students' research projects.
- ACM COMPASS Shadow Program Committee 2021: I assisted with reviewing papers.
- 2030 Compass CoLab (which is part of a larger project, The Agenda 2030 Compass Methodology and toolbox for strategic decision making for the UN's Sustainable Development Goals (SGDs).
- Misinformation, Information Campaign, and Event Data Working Group, SAMSI.

Award & Grant

- UNR Spring Award-Research Paper Competition, 1st place (2019)
- Research Travel Award, PolMeth & MIT Program Committee (2019)
- UNR Research Grant (2018)
- Political Network Fellowship Travel Award, American Political Science Association, Political Network Committee (2017)
- UNR Spring Award-Research Paper Competition, 2nd place (2017)