

Yifan Liu

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Research Interests

Policy Fields: energy transportation infrastructure, climate technologies, AI technologies

Methodology: mixed methods, causal inferences, machine learning, natural language processing, computer vision, network analysis

Education

Georgia Institute of Technology, Atlanta, GA

Ph.D. in Public Policy (concentration: Climate, Environmental, and Technology Policy) 2026

M.S. in Computer Science (concentration: Machine Learning) 2026

Cornell University, Ithaca, NY

M.P.A. in Environmental Economics and Policy 2021

Beijing Foreign Studies University, Beijing, China

MEcon in International Economics & Finance 2021

B.A. in European Studies & B.A. in Economics 2018

Research Positions

Harvard Business School, Boston, MA

Visiting Doctoral Researcher, Climate and Sustainability Impact Lab 2023 - present

Georgia Institute of Technology, Atlanta, GA

Doctoral Researcher, Data Science and Policy Lab 2021 - present

Graz University of Technology, Graz

Visiting Scholar, Institute for Advanced Studies on Science Technology and Society 2024

Cornell University, Ithaca, NY

Research Assistant, Dyson School of Applied Economics and Management 2020 - 2021

Duke University, Remote

Research Assistant, Environmental Research Center 2020 - 2021

Tsinghua University, Beijing

Researcher, School of Social Sciences & School of Public Policy and Management 2019 - 2020

Peer-reviewed Publications

Liu, Y., Francis, A., Hollauer, C., Lawson, M.C., Li, M., Shaikh, O., Cotsman, A., Bhardwaj, K., Banboukian, A., Webb, A., Asensio, O.I. (2023). Reliability of electric vehicle charging infrastructure: A cross-lingual deep learning approach. *Communications in Transportation Research*, 3, 100095.

Working Papers

Liu, Y., Asensio, O.I., Toffel, M.W. Why is electric vehicle (EV) charging so unreliable? The role of competition in supplementary services [*Target Journal: Management Science*]

Liu, Y., Asensio, O.I. EV charging service desert [*Target journal: Science Policy Forum*]

Anne, V.S.R., Kibria, G., **Liu, Y.**, Asensio, O.I., Peeta, S. Promoting sustainable travel modes

through health and environmental information [*Target journal: PNAS*]

Anne, V.S.R., **Liu, Y.**, Kibria, G., Asensio, O.I., Peeta, S. Gamification and sustainable travel modes [*Target journal: Transportation Research Part F*]

Wang, L., **Liu, Y.**, Goel, A. "Good" XAI Design: For What? In Which Ways? [*In print: Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*]

Conferences/Invited Talks

Organizer

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| Policymaking at the federal, state, and local levels (student ambassador) | 2024 |
| Association for Public Policy Analysis & Management (APPAM) Annual Conference | |
| Targeting policies for climate resilience in disadvantaged communities (panel chair) | 2024 |
| 81st Annual Midwest Political Science Association (MPSA) Conference | |
| Targeting policies for climate resilience in disadvantaged communities (panel organizer) | 2023 |
| Association for Public Policy Analysis & Management (APPAM) Annual Conference | |

Presenter

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| AI-powered measures of charger reliability in U.S. electric vehicle infrastructure | 2024 |
| Harvard Business School Climate Seminar, Harvard Business School | |
| Generative AI and electric vehicle service operations in urban and remote areas | 2024 |
| Data for Policy 2024 | |
| Politics of equity in the U.S. electric vehicle charging infrastructure | 2024 |
| 81st Annual Midwest Political Science Association (MPSA) Conference | |
| Competition in electric vehicle charging service | 2024 |
| Workshop for Original Policy Research, Georgia Tech | |
| Electric vehicle charging service deserts | 2024 |
| Interdisciplinary PhD Workshop in Sustainable Development, Columbia University | |
| The usage of AI in the context of electric vehicle charging service | 2024 |
| Energy Policy and Innovation Center, Georgia Tech | |
| Fostering smart and sustainable travel through engaged communities | 2024 |
| NSF site visit, Georgia Tech | |
| Distributive equity in the U.S. electric vehicle charging infrastructure | 2023 |
| Association for Public Policy Analysis & Management (APPAM) Annual Conference | |
| Citizen-generated intelligence for global transport electrification policies | 2022 |
| Data for Policy 2022 | |
| Machine learning and the reliability of EV charging infrastructure: Evidence from Asia | 2022 |
| Association for Public Policy Analysis & Management (APPAM) Annual Conference | |
| Distributional equity in the provision of EV charging infrastructure | 2022 |
| Berkeley/Sloan Summer School in Environmental and Energy Economics, UC Berkeley | |
| Do open or closed networks serve consumers better? Evidence from the U.S. and Europe | 2021 |
| Association for Public Policy Analysis & Management (APPAM) Annual Conference | |
| Unlocking the potential for developing pollinator-friendly solar in China | 2021 |
| AgriVoltaics 2021 | |

Discussant

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| Greener and more-resilient grids, healthier transportation, and faster innovation | 2023 |
| Association for Public Policy Analysis & Management (APPAM) Annual Conference | |

Funding and Awards

Best Paper Award (Presentation), National Academies Transportation Research Board	2025
Graduate Research Assistantship, National Science Foundation	2021 - 2025
Graduate Student Travel Support, Georgia Tech Ivan Allen College of Liberal Arts	2021 - 2024
Travel Fellowship, Georgia Tech Strategic Energy Institute	2024
Travel Grant, Georgia Tech School of Public Policy	2021 - 2023
Future Leaders Climate Summit Fellowship, Aspen Institute	2022
Summer School Fellowship in Environmental and Energy Economics, UC Berkeley	2022
Second Place, Master Modeler Competition	2022
SMART Research Fellowship with M-Farm in Kenya, Cornell University	2020 - 2021
Horizon Program Research Fellowship, Tsinghua University	2019 - 2020
China National Scholarship, Ministry of Education	2019
Outstanding Graduate of Beijing, Beijing Municipal Commission of Education	2018
Undergraduate Dissertation Distinction Award, Beijing Foreign Studies University	2018

Teaching Experience

Georgia Institute of Technology , Atlanta, GA	
Tech to Teaching Certificate	2025
Teaching Assistant: PUBP 3042 Data Science for Public Policy	Spring 2025
Teaching Assistant: PUBP 3042 Data Science for Public Policy	Fall 2024
Guest lecturer: PUBP 8751 Big Data and Policy	Spring 2023
University of Rhode Island , South Kingstown, RI	
Guest lecturer: MGT445 Strategic Management	Spring 2025
Beijing Foreign Studies University , Beijing	
Teaching Assistant: Advanced Microeconomics	Fall 2019

Service and Leadership

Journal Peer Reviewer: Nature Communications, Energy Policy, Analytics, Energy & Buildings, Energies, Journal of Infrastructure, Policy and Development

Conference Submission Reviewer: Association for Public Policy Analysis and Management Annual Conference; Academy of Management Annual Conference; Annual AAAI Conference on Artificial Intelligence; Atlanta Conference on Science and Innovation Policy

Journal Editor:

Visiting Editor, Princeton's Journal of Public and International Affairs	2024
Editor, Cornell Policy Review	2019 - 2021

University Service:

Graduate Student Advisory Board Member, Ivan Allen College of Liberal Arts	2023 - Present
Women in Public Policy Board Member, Cornell University	2019 - 2021

Additional Training

Alliance Graduate Summer School in Paris, Columbia University	2024
Climate Change AI Summer School (Virtual)	2023
The Oxford Summer School in Economic Networks, University of Oxford	2023

Summer Institute in Computational Social Science (SICSS), National Science Foundation	2023
Berkeley/Sloan Summer School in Environmental and Energy Economics	2022
European and International Policy, University of Bucharest	2015 - 2016

Media Coverage

Bloomberg. One in five public EV chargers in the US don't work, study finds.	2024
Harvard Business School. The state of EV charging in America.	2024
Drawdown Georgia. Could electric vehicles drive more equitable mobility in Georgia?	2023

Short-Term Consulting

World Bank, Global Engagements Unit of the Agriculture and Food Global Practice "Implications of climate change on agroecological zones in FOLUR countries."	2020–2021
HSBC Pollination Climate Asset Management "Market gap assessment of natural capital funds."	2020–2021
New York State Energy Research & Development Authority "Impact evaluation of Clean Energy Community Program."	2019
Paulson Institute, Green Finance Center Research on carbon markets, green funds, fintech, and green credits.	2019
Bank of China "Impacts of artificial intelligence on commercial banks."	2017

Technical Skills

Python, R, STATA, MATLAB, SQL, Tableau, Power BI, EViews, ArcGIS, C++, LaTeX
 English (fluent), Chinese (native), Romanian (fluent), French (intermediate)