

Yifan Liu (she/her/hers)

Updated May 05, 2025

S1289, 756 W Peachtree St NW, Atlanta, GA 30318, USA | Georgia Institute of Technology

Email: liuyifan@gatech.edu | Website: yifanliu0304.github.io/island | Google Scholar | LinkedIn

Research Interests

Policy Fields: energy, environmental, and climate policy; transportation; technology

Methodology: causal inference, artificial intelligence, machine learning, mixed methods

Education

Georgia Institute of Technology, Atlanta, GA

Ph.D. in Public Policy (concentration: Energy and Transportation 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

Georgia Institute of Technology, Atlanta, GA

Student Affiliate, Energy Policy and Innovation Center 2025 - present

Doctoral Researcher, Data Science and Policy Lab 2021 - present

Harvard Business School, Boston, MA

Visiting Doctoral Researcher, Climate and Sustainability Impact Lab 2023 - 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 Journal Articles

1. **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.

Peer-reviewed Conference Papers with Proceedings

1. Viswa A., Md Gulam, K., **Liu, Y.**, Asensio, O. I., Peeta, S. (2025). Effectiveness of Health and Environmental Information Provision in Promoting Sustainable Travel Modes. In *Proceedings of the Transportation Research Board 104th Annual Meeting*. TRBAM-25-02656. Washington DC. (**Best Paper Award, TRB 2025, AEP35 Committee**).
2. Wang, L., **Liu, Y.**, Goel, A. "Good" XAI Design: For What? In Which Ways? In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems* (pp. 1-13). ACM.
3. **Liu, Y.**, Asensio, O. I. (2024). Generative AI and electric vehicle service operations in urban

and remote areas. *Data for Policy 2024*. Generative AI for Sound Decision-Making, Paper 9951. Imperial College London. London, UK. <https://members.dataforpolicy.org/2024-conference-day-2/>.

4. **Liu, Y.**, Lawson, M. C., Hollauer, C., Asensio, O. I. (2022). Citizen generated intelligence for transport electrification policies. *Data for Policy 2022*, Data, Emerging Technologies and Citizens. Paper 2232. Hong Kong University of Science and Technology. Hong Kong. <https://members.dataforpolicy.org/hong-kong-programme>.

Working Papers

1. “Why is electric vehicle (EV) charging so unreliable? The role of competition in supplementary services” (with Omar I. Asensio, Georgia Tech and Mike W. Toffel, Harvard Business School).
2. “EV charging service deserts” (with Omar I. Asensio).
3. “Promoting sustainable travel modes through health and environmental information” (with Anne Rupa, Kibria Kulam, Omar I. Asensio, Srinivas Peeta).
4. “Gamification and sustainable travel modes” (with Rupa Anne, Kibria Kulam, Omar I. Asensio, Srinivas Peeta).

Invited Talks & Conferences Presentations

Organizer

Association for Public Policy Analysis & Management (APPAM) Fall Research Conference	2024
Policymaking at the federal, state, and local levels (student ambassador)	
Annual Midwest Political Science Association (MPSA) Conference	2024
Green industrial policies: from global to local policies and effects (panel chair)	
APPAM Fall Research Conference	2023
Targeting policies for climate resilience in disadvantaged communities (panel organizer)	

Presenter

Alliance for Research on Corporate Sustainability (ARCS) Annual Conference, HEC Paris	2025
“Why is EV charging so unreliable? The role of competition in supplementary services”	
Atlanta Conference on Science and Innovation Policy	2025
“Industrial policy on EV charging infrastructure”	
Columbia University Interdisciplinary PhD Workshop in Sustainable Development, New York	2025
“Why is EV charging so unreliable?”	
Harvard Business School Climate Seminar, Boston	2024
“AI-powered measures of charger reliability in U.S. electric vehicle infrastructure”	
Columbia University Interdisciplinary PhD Workshop in Sustainable Development, New York	2024
“Electric vehicle charging service deserts”	
Georgia Tech Energy Policy and Innovation Center (EPIcenter), Atlanta	2024
“The usage of AI in the context of electric vehicle charging service”	
Annual MPSA Conference, Chicago	2024
“Politics of equity in the U.S. electric vehicle charging infrastructure”	
Georgia Tech Workshop for Original Policy Research, Atlanta	2024
“Competition in electric vehicle charging services”	
Institute for Advanced Studies on Science Technology and Society, Graz	2024

“Social impacts of clean energy transition”	
NSF site visit at Georgia Tech, Atlanta	2024
“Fostering smart and sustainable travel through engaged communities”	
APPAM Fall Research Conference, Atlanta	2023
“Distributive equity in the U.S. electric vehicle charging infrastructure”	
APPAM Fall Research Conference, Washington DC	2022
“Machine learning and the reliability of EV charging infrastructure: Evidence from Asia”	
UC Berkeley/Sloan Summer School in Environmental and Energy Economics, Berkeley	2022
“Distributional equity in the provision of EV charging infrastructure”	
APPAM Fall Research Conference, San Antonio	2021
“Do open or closed networks serve consumers better? Evidence from the U.S. and Europe”	
AgriVoltaics 2021, virtual	2021
“Unlocking the potential for developing pollinator-friendly solar in China”	

Discussant

Greener and more-resilient grids, healthier transportation, and faster innovation	2023
APPAM Fall Research Conference, Atlanta	

Funding and Awards

Best Paper Award (Presentation), National Academies Transportation Research Board	2025
Outstanding Ph.D. Student Award, Jimmy and Rosalyn Carter School of Public Policy	2025
Summer Research Fellowship, Energy Policy and Innovation Center	2025
Graduate Research Assistantship, Georgia Tech	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)