

Ying Yu

Postdoctoral Research Associate
Data-Driven EnviroLab
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PROFESSIONAL EXPERIENCE

2024/05–Present	Postdoctoral Research Associate, Data-Driven EnviroLab University of North Carolina at Chapel Hill
2020/08–2024/05	Research Analyst, Carbon Monitor Tsinghua University

EDUCATION

Ph.D., Environmental Sciences and Engineering, 2024
University of North Carolina at Chapel Hill, Gillings School of Global Public Health

M.Sc., Technology Economy and Management, 2020
Xiamen University, School of Management

B.Sc., Financial Engineering, 2017
Central China Normal University, School of Economics and Management

PEER-REVIEWED JOURNAL PUBLICATIONS

(*indicates corresponding author; [Google Scholar](#); [ORCID](#))

- [15] Song, K.*, Hsu, A.*, Chakraborty, T. C., Peng, W., **Yu, Y.**, Kittner, N. (2025). [Projected widening of sociodemographic heat disparities in the United States by end of century](#). *One Earth*, Online. (SCIE Q1; 5-year IF-15.3)
- [14] **Yu, Y.***, Li, X., Hsu, A., Kittner, N.* (2024). [Mapping spatiotemporal disparities in residential electricity inequality using machine learning](#). *Environmental Science & Technology*, 58(45), 19999-20008. (SCIE Q1; 5-year IF-11.6)
- [13] Lu, C.*, Huang, Y., **Yu, Y.**, Hu, J., Mo, H., Li, Y., ... & Liu, Z.* (2024). [Health co-benefits of post-COVID-19 low-carbon recovery in Chinese cities](#). *Nature Cities*, 1-11.
- [12] **Yu, Y.**, Kittner, N.* (2024). [Hot or cold temperature disproportionately impacts U.S. energy burdens](#). *Environmental Research Letters*, 19, 014079. (SCIE Q1; 5-year IF-7.2)
- [11] Yan, Z., **Yu, Y.**, Du, K.*, Zhang, N.* (2024). [How does environmental regulation promote green technology innovation? Evidence from China's Total Emission Control Policy](#). *Ecological Economics*, 219, 108137. (SSCI Q1; 5-year IF-6.9)

- [10] Liu, Z.* , Dou, X., **Yu, Y.**, Tan, J., Sun, T., Meng, J. (2023). [China's embodied carbon emission transfer in global trade](#). (in Chinese) *China Journal of Econometrics*, 3(4), 1225-1242. (CSSCI)
- [9] Dou, X., Hong, J., Ciais, P., Chevallier, F., Yan, F., **Yu, Y.**, ... & Liu, Z.* (2023). [Near-real time global gridded daily CO₂ emissions 2021](#). *Scientific Data*, 10(1), 69. (SCIE Q1; 5-year IF-8.9)
- [8] Huang, Z., Wang, J., Bing, L., Qiu, Y., Guo, R., **Yu, Y.**, ... Xi, F.* , & Liu, Z.* (2023). [Global carbon uptake of cement carbonation accounts 1930–2021](#). *Earth System Science Data*, 15(11), 4947-4958. (SCIE Q1; 5-year IF-12.1)
- [7] Dai, F.* , Kahrl, F., Gordon, J.A., Perron, J., Chen, Z., Liu, Z., **Yu, Y.**, et al. (2023). [U.S.-China coordination on carbon neutrality: An analytical framework](#). *Climate Policy*, 23(7), 929-943. (SSCI Q1; 5-year IF-6.5)
- [6] **Yu, Y.**, Yamaguchi, K., Thuy, T.D., Kittner, N.* (2022). [Will the public in emerging economies support renewable energy? Evidence from Ho Chi Minh City, Vietnam](#). *Renewable and Sustainable Energy Reviews*, 169, 112942. (SCIE Q1; 5-year IF-16.8)
- [5] **Yu, Y.**, Yamaguchi, K., Kittner, N.* (2022). [How do imports and exports affect green productivity? New evidence from partially linear functional-coefficient models](#). *Journal of Environmental Management*, 308, 114422. (SCIE Q1; 5-year IF-7.9)
- [4] Liu, Z.* , Sun, T., **Yu, Y.**, Ke, P., Deng, Z., Lu, C., et al. (2022). [Near-real-time carbon emission accounting technology toward carbon neutrality](#). *Engineering*, 14, 44-51. (SCIE Q1; 5-year IF-11.6)
- [3] Du, K., **Yu, Y.**, Li, J.* (2020). [Does international trade promote CO₂ emission performance? An empirical analysis based on a partially linear functional-coefficient panel data model](#). *Energy Economics*, 92, 104983. (SSCI Q1; 5-year IF-12.4)
- [2] Du, K., **Yu, Y.**, Wei, C.* (2020). [Climatic impact on China's residential electricity consumption: Does the income level matter?](#) *China Economic Review*, 63, 101520. (SSCI Q1; 5-year IF-6.2)
- [1] Bai, C., Du, K.* , **Yu, Y.**, Feng, C. (2019). [Understanding the trend of total factor carbon productivity in the world: insights from convergence analysis](#). *Energy Economics*, 81, 698-708. (SSCI Q1; 5-year IF-12.4)

UNDER REVIEW & WORKING PAPERS

- [4] **Yu, Y.**, Manya, D., Hsu, A. Bridging territorial and consumption-based emissions for urban climate action assessment. Under Review in *npj Urban Sustainability*.
- [3] **Yu, Y.**, Wang, X., Manya, D., Hsu, A. Machine learning estimates for G20 subnational GHG emissions from 2000-2020 using self-reported emissions data. Under Review in *Scientific Data*.
- [2] Du, K., **Yu, Y.**, Wang D., Wang X., Zheng, A. Long-run adaptive behaviour amplifies future electricity demand (co-first author). Working Paper.

- [1] Lu, C., **Yu, Y.**, ... & Liu, Z. Co-benefits of energy transition in the power sector in China and India. Working Paper.

RESEARCH GRANTS

"The Role of Climate AI to Support Cities in Climate Mitigation, Adaptation, and Energy Equity"

Project Participant, Global Covenant of Mayors for Climate and Energy, \$25,000, 2025

"Catalyzing virtuous cycles of climate action: an empirical model of polycentric climate governance"

Project Participant, National Science Foundation, \$503,819, 2022-2026

"Non-state climate action integrity: research and stakeholder engagement"

Project Participant, IKEA Foundation, \$3,500,000, 2024-2026

"Revisiting energy poverty from a climate perspective using space-time models"

Principal Investigator, Duke University & Alfred P. Sloan Foundation, \$14,117, 2023-2024

"Urban Environment and Social Inclusion Index 2022-2024"

Project Participant, Samuel Family Foundation, 2022-2024

"Bringing Southeast Asia Home"

Project Participant, Henry Luce Foundation, \$900,000, 2022-2027

FELLOWSHIP, AWARDS & HONORS

Doctoral Dissertation Completion Fellowship, UNC-Chapel Hill, \$22,000, 2023-2024

Travel Award, International Public Policy Association, \$1,500, 2023

Travel Grant, UNC-Chapel Hill, \$500, 2022

Summer School Fellowship, UC Berkeley, \$1,000, 2022

Tang Lixin Scholarship, Lixin Tang Education Development Fund, \$1500, 2019

National Scholarship, Ministry of Education, \$3000, 2019

National Scholarship, Ministry of Education, \$3000, 2018

National Scholarship, Ministry of Education, \$1200, 2016

CONFERENCES, WORKSHOPS & INVITED TALKS

- 2025 Research Collaboration Workshop in Women in the Science of Data and Mathematics (WiSDM), **Team Member & Speaker**; Chapel Hill, Aug. 2025; Urban Greenhouse Gas Conference and Stakeholder Summit, **Poster Presenter**, Geneva, Apr. 2025

- 2024 APPAM Fall Research Conference, **Speaker & Chair**, National Harbor, Nov. 2024; Lenovo, **Invited Speaker**, Morrisville, Sept. 2024; International Symposium on Sustainable Systems and Technology (ISSST), **Speaker**, Baltimore, Jun. 2024; HKU-Urban Systems Institute (USI) Inaugural Conference, **Speaker**, Hong Kong, Jan. 2024
- 2023 UNC-Chapel Hill Department of City and Regional Planning, **Invited Speaker**, Chapel Hill, Nov. 2023; The 40th USAEE/IAEE North American Conference, **Poster Presenter**, Chicago, Nov. 2023; Duke University Energy Data Analytics Symposium, **Speaker**, Durham, Oct. 2023; The 6th International Conference on Public Policy, **Speaker**, Toronto, Jun. 2023; Student Participatory Workshop on Climate and Energy Decision Making, **Speaker**, Pittsburgh, May 2023; The 39th USAEE/IAEE North American Conference, **Speaker**, Houston, Oct. 2022
- 2022 UNC-Chapel Hill GASP seminars, **Speaker**, Chapel Hill, Sept. 2022; Berkeley Summer Camp in Environmental & Energy Economics, **Flash-talk Speaker**, Berkeley, Aug. 2022; Columbia University Interdisciplinary PhD Workshop in Sustainable Development, **Speaker**, Remote, Apr. 2022
- 2020 The 14th Graduate Climate Conference, **Speaker**, Remote, Nov. 2020
- 2019 The 37th USAEE/IAEE North American Conference, **Speaker**, Denver, Nov. 2019

TEACHING

Planning for Environmental Sustainability, Feb. 2025
Guest Lecturer, California State Polytechnic University Pomona

Energy Modeling for Environment and Public Health, Spring 2023
Teaching Assistant, UNC-Chapel Hill

Economic Analysis for Public Policy, Oct. 2024
Guest Lecturer, UNC-Chapel Hill

Applied Issues in Geographic Information Systems, Jul. 2023
Guest Lecturer, UNC-Chapel Hill

Macroeconomics, Fall 2019
Teaching Assistant, Xiamen University

STUDENT ADVISING AND MENTORSHIP

Undergraduate Thesis

Yuridia Zarate, Urban and Regional Planning, Cal Poly Pomona '25

Daniel Jaques, Urban and Regional Planning, Cal Poly Pomona '25

Priscilla Robles, Urban and Regional Planning, Cal Poly Pomona, '25

Giselle Olmos, Urban and Regional Planning, Cal Poly Pomona '25

Student Research Assistants

Andrew Martin, Undergraduate in GIS, UNC-Chapel Hill '26

Cameron Kaplinger, Undergraduate in Data Science, UNC-Chapel Hill '26

ACADEMIC SERVICE

Reviewer

Climate Change AI Grants (5); Nature Cities (2); Energy Economics (2); Environmental Research (1); Environmental Research: Infrastructure and Sustainability (1); Energy and Climate Change (1); Energy (1); Journal of Cleaner Production (4); Environmental Research Letters (1); Environmental Research Communications (2); Humanities & Social Sciences Communications (1); The Journal of International Trade & Economic Development (1); Utilities Policy (1)

Professional Membership

Association for Public Policy Analysis and Management (APPAM); International Public Policy Association (IPPA); United States Association for Energy Economics (USAEE); The Econometric Society