

**Zhiyuan (Jean) Yao**

[zyao@appstate.edu](mailto:zyao@appstate.edu)  
323 Rankin Science West  
572 Rivers Street  
Boone, NC 28608280

## EDUCATION

---

- |  |  |           |
|--|--|-----------|
| ➤ University of Cincinnati   | Ph.D. in Geographical Information Sciences               | 2015-2020 |
| ➤ Guangzhou Institute of Geochemistry<br>Chinese Academy of Sciences | M.S. in Geography and Geographical Information Sciences, | 2011-2014 |
| ➤ Shandong Normal University   | B.S. in Geographical Information Sciences                | 2007-2011 |

## PROFESSIONAL EXPERIENCES

---

- Assistant Professor, Department of Geography and Urban Planning, Appalachian State University, 2024/08 -
- Spatial Data Scientist, Data Science Center, UCLA, 2020/05 - present
- GIS Consultant, University of Cincinnati Libraries, 2018/5 – 2020/4
- Research Assistant, Health Geography and Disease Modeling Lab, Department of Geography and GIS, University of Cincinnati, 2020/05 - 2020/12
- Research Assistant, Spatial Temporal Analysis and Modelling (STAM), Department of Geography and GIS, University of Cincinnati, 2015/08 - 2020/04
- Research Assistant, Community Activity Research Exposure Study (CARES), Department of Environmental Health, University of Kentucky, 2018/05 - 2020/10

## PUBLICATIONS

---

- Yao, Z., Blumenberg, E., & Wander, M. (2024). Sex Differences in Child Care Travel. *Transport Findings*.
- Blumenberg, E., Wander, M., & Yao, Z. (2024). Decisions & distance: The relationship between child care access and child care travel. *Journal of Transport Geography*, 114, 103756.
- Blumenberg, E., Yao, Z. \*, & Wander, M. (2023). Variation in child care access across neighborhood types: A two-step floating catchment area (2SFCA) approach. *Applied Geography*, 158, 103054.
- Li, J. \*, Kim, C., Cuadros, D., Yao, Z., & Jia, P. (2023). Changes of Grocery Shopping Frequencies and Associations with Food Deserts during the COVID-19 Pandemic in the United States. *Journal of Urban Health*, 1-12.
- Yao, Z., & Kim, C. \* (2022). Analyzing the multiscale patterns of jobs-housing balance and employment self-containment by different income groups using LEHD data: A case study in the Cincinnati metropolitan area. *Computers, Environment and Urban Systems*, 96, 101851
- Yao, Z., & Kim, C. \* (2019). The Changes of Urban Structure and Commuting: An Application to Metropolitan Statistical Areas in the United States. *International Regional Science Review*, 42(1), 3-30.

## CONFERENCE PROCEEDINGS

---

- Siquiq, F., Blumenberg, E., & Yao, Z. (2024). Gender, Travel, and Activity Space. *Annual Meeting of Association of Collegiate Schools of Planning*, Seattle, WA, 2024
- Yao, Z., Blumenberg, E., & Wander, M. (2024) Variation in child care access across neighborhood types: A two-step floating catchment area (2SFCA) approach. *Annual Meeting of American Association of Geographers*, Honolulu, HI, 2024
- Yao, Z., & Kim, C. (2023). Analyzing the multiscale patterns of jobs-housing balance and employment self-containment by different income groups using LEHD data: A case study in the Cincinnati metropolitan area. *Annual Meeting of American Association of Geographers*, online, 2023
- Yao, Z., & Kim, C. (2021). Do people working in suburban areas experience less traffic congestion? An empirical study of the OKI region. *Annual Meeting of American Association of Geographers*, online, 2021.
- Yao, Z., & Kim, C. (2019). Is a jobs-housing balance possible to reduce commuting? An empirical study of the Cincinnati Metropolitan Area based on LEHD data. *American Association of Geographers Annual Meeting*, Washington D.C., 2019.
- Yao, Z., & Kim, C. (2017). The changes of urban structures and their effect on commuting patterns. *American Association of Geographers Annual Meeting*, Boston, 2017.
- Yao, Z., & Kim, C. (2016). Measuring spatial structure of American metropolitan statistical areas and an application to commuting time. *63rd Annual North American Meetings of the Regional Science Association International*. Minneapolis, MN.

## RESEARCH UNDER PREPARATION

---

- Riding Through Change: Gender-Specific Trends in Bike Share Pre- and Post-COVID-19
- The scale effect of activity space on the patterns of grocery shopping in Great Twin Cities in Minnesota
- The gender disparity in trip complexity in Los Angeles

## TEACHING EXPERIENCES

---

- **Instructor, Spring 2025**
  - GHY5530 Transportation GIS
  - GHY4812/5812 GIS Analysis and Modelling
- **Instructor, Fall 2024**
  - GHY 5815 GIS Programming and Database
  - GHY4812/5812 GIS Analysis and Modelling
  - GHY5800 Advanced Quantitative Analysis
- **Carpentries Instructor (Since 2021/04)**
  - [R for Reproducible Scientific Analysis](#)
  - [Programming with Python](#)
  - [Plotting and Programming in Python](#)
  - [Geospatial analysis with R](#)

- [Mapping and analyzing with QGIS](#)
- **Instructor, 2021/01-2021/03 Winter Quarter**
  - EH207, Introduction to GIS, Fielding School of Public Health, UCLA
- **Guest Lecture, Fall 2020 & Winter 2021**
  - DH199, Mapping racism, Urban design, and Thermal Inequality, Institute for Society and Genetics & Department of History, UCLA
  - EPS 1111, Stratigraphic and Field Geology, Department of Earth, Planetary, and Space Sciences, UCLA
- **Instructor (2019)**
  - GEOG6081C/5181C, Introduction to GIS, Department of Geography and GIS, University of Cincinnati
  - GEOG1001, Physical Geography, Department of Geography and GIS, University of Cincinnati
- **Teaching Assistant (2015-2018)**
  - GEOG5171C, Introduction to GIS, Department of Geography and GIS, University of Cincinnati
  - GEOG1040, Earth from Space, Department of Geography and GIS, University of Cincinnati
  - GEOG6091C, Advanced GIS, Department of Geography and GIS, University of Cincinnati
  - GEOG6085C, Spatial Statistics II, Department of Geography and GIS, University of Cincinnati

## GRANTS, AWARDS, & HONORS

---

- **CETLSS Teaching Quality Framework Grant, \$2000**, Appalachian State University, Spring 2025
- **College of Arts and Sciences, Summer Research Grant, \$5000**, Appalachian State University, 2025/05 - 2025/08
- **Minnesota Institute for Leadership, \$2000**, University of Minnesota, 2024/07
- **LAUC Research & Professional Development Grant, \$4988, Co-PI**, Librarians Association of the University of California, 2024 – 2025
- **Laura Bush 21<sup>st</sup> Century Librarian Program, \$230,000, Program Coordinator**, Institute of Museum and Library Service, 2022/08
- **LAU-LA Mini Grant, \$500**, UCLA Library, 2020, 2021, 2023, & 2024
- **AAG-UIUC Research Grant, \$5000**, University of Illinois at Urbana-Champaign, 2019/07
- **Excellent Student Tuition and Insurance Grant, \$5000**, College of Arts and Sciences, University of Cincinnati, 2018 - 2020

## MEMBERS & AFFILIATION

---

- **American Association of Geographers**, 2016 – 2025
- [The Carpentries](#) **Certified Instructor**, 2021/04 - present
- **UC GIS Leadership Committee**, Committee member, 2020/6 – present
- **Graduate Student Association**, President, Department of Geography, University of Cincinnati, 2017 – 2018
- **Graduate Student Leadership**, Monitor, Chinese Academy of Sciences, 2011 - 2012

## RELATED SKILLS

---

- **Software** ArcGIS Pro, QGIS, SPSS, Visual Studio, R Studio
- **Programming** Python (GIS modeling), R (Statistical analysis).
- **Data Analysis** Spatial Analysis, Geostatistical Analysis (Network analysis and Accessibility analysis), Machine Learning Modeling, Urban Structures and Commuting/Travel Pattern Analysis.
- **GIS Techniques** Projections; Geocoding; Creating Professional maps.