## Wenzheng Li, Ph.D.

Department of City and Regional Planning, Cornell University 214 West Sibley Hall, Ithaca, New York, 14853
ORCID: 0000-0003-2895-5434 | https://wenzhengli-etal.github.io/wl563@cornell.edu | (607)262-5497

#### **Positions**

2024 Visiting Lecturer, Department of City and Regional Planning, Cornell University

Fall 2024 CRP 4080: Introduction to Geographic information system

CRP 2100: Neighborhood Change in the City: Quantitative Methods (co-instructor)

CRP 3280/4280: Mapping and Counter-Mapping (co-instructor)

Spring 2025 CRP 1200: Intro to Statistics for Urban Studies

CRP 4680/5680: Urban Spatial Data Analytics

Ph.D. instructor, Department of City and Regional Planning, Cornell University

Summer 2024 CRP 3850/5850 Introduction to Urban Data Science

#### Education

2019-2024 Ph.D. in City and Regional Planning, Cornell University, Ithaca, NY, USA

Dissertation: Polycentric Spatial Development—Measures, Explanations, and Performance

Committee: Stephan Schmidt, Department of City and Regional Planning Shanjun Li, Dyson School of Applied Economics and Management John I. Carruthers, Field of Regional Science

**Funding:** This research was supported by the Sage Fellowship awarded by the Graduate School of Cornell University; the C.V. Starr Fellowship awarded by The East Asian Program of the Einaudi Center.

2016-2018 Master of Regional Planning (MRP), Cornell University, Ithaca, NY, USA

2012-2016 Bachelor of Science in Remote Sensing, China University of Geosciences, Wuhan, China

#### Fields of Interest

**Topics** land use policy and regional governance, social inequality, climate change & sustainable development, regional science & Urban economics, Multi-modal trip planning & Mobility-as-a-Services

**Methods** urban data analytics, GIS/remote sensing, applied econometrics, machine learning, natural language process, spatial statistics and modeling,

Study Area United States, Europe, China, Africa

# Publications (\* Corresponding authors)

- Li, Wenzheng\*, Stephan Schmidt. "Can spatial patterns mitigate the urban heat island effect? Evidence from German metropolitan regions." *Environment and Planning B: Urban Analytics and City Science*. https://doi.org/10.1177/23998083241227500
  - Media coverage: <u>Multiple city hubs, dispersed parks keep metro areas cooler</u>, Cornell Chronicle

- **Li, Wenzheng\***, Stephan Schmidt, and Stefan Siedentop. "Can polycentric urban development simultaneously achieve both economic growth and regional equity? A multi-scale analysis of German regions." *Environment and Planning A: Economy and Space*: 56(2), 525-545. <a href="https://doi.org/10.1177/0308518X2311919">https://doi.org/10.1177/0308518X2311919</a>
- **Li, Wenzheng\***, and Stephan Schmidt. "The spatial-temporal evolution of urban development patterns in Chinese cities: Dynamics and interpretations." *Growth and Change* 55, no. 2: e12722. https://doi.org/10.1111/grow.12722

Schmidt, Stephan\*, **Wenzheng Li**, John Carruthers, and Stefan Siedentop. "Planning institutions and urban spatial patterns: Evidence from a cross-national analysis." *Journal of Planning Education and Research*. https://doi.org/10.1177/0739456X211044203

Schmidt, Stephan\*, Said Nuhu, Ryan Thomas, **Wenzheng Li**. "Place attachment, regional identity and perceptions of urbanization in Moshi, Tanzania." *Habitat International* 150 (2024): 103132. https://doi.org/10.1016/j.habitatint.2024.103132

Matuke, Samantha, Stephan Schmidt\*, and Wenzheng Li. "The rise and fall of the American pedestrian mall." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 14, no. 2: 129-144. <a href="https://doi.org/10.1080/17549175.2020.1793804">https://doi.org/10.1080/17549175.2020.1793804</a>.
 Media coverage: Lessons From the Rise and Fall of the Pedestrian Mall, Bloomberg CityLab

## **Articles in Progress**

#### Journal Articles: Under Review

- **Li, Wenzheng**, Yuanshuo Xu, John I. Carruthers\*. "The dynamic adjustment process of population and employment—evidence from Chinese prefectural regions." under review in *Journal of Economic Geography*.
- **Li, Wenzheng**, Ziye Zhang\*. "Vertical Price Curve in the Beijing Residential Housing Market." under review in *Habitat International*.
- **Li, Wenzheng**, Stephan Schmidt\*, Jintao Gu, "Urban spatial patterns and air pollution—Evidence from German metropolitan regions." under review in *Cities*

### Journal Articles: In Progress

The Effect of Remediating Severely Polluted Water Bodies: Evidence from Housing Sales in Shanghai

How do regions respond to climate change? Using natural language process (NLP) to understand climate change adaptation and mitigation of German regions (with Stephan Schmidt, Yucheng Zhang)

Inter-jurisdictional cooperation and sustainable development goals (SDGs)—An evaluation of the Yangtze River Delta (YRD) megacity region (with Yuanshuo Xu)

# Teaching as a Ph.D. Student/Candidate

#### Co-instructor, Cornell University

- Spring 2022 CRP 5680/4680 Urban Spatial Data Analytics (Course evaluation: 4.5/5)
  - Developed course materials, including codebooks, problem sets, and class slides.
  - Led lectures for 3 weeks. Topics include Spatial Data Management, Processing, and Visualization, and the Basics of ArcPy and ArcGIS API

- Spring 2021 CRP 6290 Advanced topics in GIS (Course evaluation: 4.5/5)
  - Developed materials for Python labs, including codebooks, problem sets, and class slides.
  - Led lectures for 4 weeks. Topics include Python Basics, Data Management, Spatial Data Analytics, Data Visualization, Web Scraping, and Map APIs.

### Teaching Assistant (TA), Cornell University

- Spring 2024 CRP 1200 Introduction to Statistics for Urban Studies
  - Fall 2022 CRP 4080 Introduction to GIS (Course evaluation: 4.6/5)
  - Fall 2021 CRP 5080 Introduction to GIS for Planners (Course evaluation: 4.9/5)
  - Summer Big Data & Business Analytics, Cornell Institute for China Economic Research (CICER) 2020
- Spring 2017 Graduate Teaching and Research Specialist (GTRS)

Undergraduate Teaching Assistant, China University of Geosciences

Spring 2016 Remote Sensing of Land Resources and Environment

### Invited Talks, Presentations, Seminars

- Nov'24 Urban spatial patterns and air quality—Evidence from German metropolitan regions. ACSP, Seattle.
- July'24 Polycentric urban development, regional disparities, and economic growth –lessons from the Germany metropolitan regions. International Association for China Planning (IACP) Conference
- May'24 The performance and governance of polycentric urban regions—Evidence from Germany. Invited Talks at the East China Normal University
- April'24 Urban form and the urban heat island effect— Evidence from Germany, American Association of Geographers (AAG) Conference (virtual), Honolulu, Hawaii
- Oct'23 Can spatial patterns mitigate the urban heat island effect? Evidence from German metropolitan regions, Association of Collegiate Schools of Planning (ACSP) Conference, Chicago
- Nov'23 Can polycentric urban development simultaneously achieve both economic growth and regional equity? A multi-scale analysis of German regions, North America Regional Science Council (NARSC) Conference, San Diego
- Nov'23 The spatial-temporal evolution of urban development patterns in Chinese cities: dynamics and interpretation, North America Regional Science Council (NARSC) Conference, San Diego
- Mar'23 Urban spatial structure and the urban heat island effect? Evidence from German regions, American Association of Geographers (AAG) Conference, Denver, Colorado
- Oct'22 Can polycentric urban development simultaneously achieve both economic growth and regional equity? A multi-scale analysis of German regions, Association of Collegiate Schools of Planning (ACSP) Conference, Toronto, Canada
- Nov'22 The determinants and Outcomes of Chinese regional growth 2000 to 2020, North America Regional Science Council (NARSC) Conference, Montreal, Canada
- May' 22 The spatial-temporal evolution toward polycentricity in Chinese cities: dynamics and explanations, International Association for China Planning (IACP) Conference (virtual)
- Oct'21 Toward Polycentricity? Exploring the Dynamic Changes of Urban Spatial Structure in China 2001 2017, ACSP Conference (virtual)
- Nov'21 Vertical housing gradients—evidence from Beijing, NARSC Conference (virtual), Denver, Colorado
- Nov'20 Housing prices and Air Quality in Beijing, NARSC Conference (virtual)

May'20 Developing Mobility-as-a-Service Serving Small Urban & Rural Communities, Tompkins County, NY, MOD On-Ramp Lessons Learned webinar 2020. Housing Prices and Time-varying NDVI, NARSC Conference, San Antonio, TX Nov'18 Awards, Grants, and Honors 2024 Accelerated Research Grants, Cornell Center for Social Sciences (\$16,000) 2023 Sage Dissertation Writing Fellowship, Cornell University C.V. Starr Fellowship, the Einaudi Center of Cornell University (\$15,000 + Tuition + Insurance) 2023 Tompkins County Mobility-as-a-Service (Maas) Pilot Program, funded by the FTA MOD On-Ramp 2019 Program (drafted the initial grant proposal, grant received: \$820,000) 2018 Alan Black Transportation Planning Grant (\$1,700) Travel Grants 2024 Graduate School Travel Grant (\$700) 2023 Graduate School Travel Grant (\$500) 2023 Department of City and Regional Planning (CRP) Travel Grant (\$500) Graduate School Travel Grant (\$600) 2022 Department of City and Regional Planning (CRP) Travel Grant (\$500) 2022 2021 Department of City and Regional Planning (CRP) Travel Grant for virtual conference (\$120) Service Undergraduate Providing academic guidance to first-year undergraduates Advisor **Session Chair** Regional Challenges and Regional Planning. International Association for China Planning (IACP) Conference 2023 Land-use and territorial spatial planning. International Association for China Planning (IACP) Conference 2021 NARSC Conference in 2023, 2022, 2021, 2020, 2018 Discussant Journal Editori Growth and Change al Board Applied Geography; Growth and Change; Scientific Report; Cities; Journal Reviewer Asian-Pacific Journal of Regional Science; Sustainable Cities and Society; The Annals of Regional Science; Journal of Planning Literature **Professional Positions** Jun'18-Project Assistant, Tompkins County Department of Social Services, Ithaca, NY Jun'19 Developed business model to facilitate the Mobility-as-a-Service (MaaS) project. Coordinated transportation planning in the southern tier NYS. Assisted with grant application. Sep'15-GIS/Remote Sensing Analyst—ToolGeo Technology, Wuhan, China Developed software platform for automatic evaluation of urban public space coverage. May'16

Developed computer version algorithms for feature extraction.

# Media Coverage

Feb'24 <u>Multiple city hubs, dispersed parks keep metro areas cooler</u>: "Polycentric" development patterns can lessen the urban heat island effect by distributing urban density and curbing the sprawl of impervious surfaces," Cornell Chronicle.

### **Datasets Published**

Mar'20 The Rise and Fall of the American Pedestrian Mall (2020) available at <a href="https://osf.io/ybdev/">https://osf.io/ybdev/</a>.

This dataset contains 125 American Pedestrian Mall records with mall properties (e.g., open/removed year) and the demographic and socio-economic factors in the associated cities.

# Affiliations/Memberships

Association of Collegiate Schools of Planning (ACSP) American Association of Geographers (AAG) Cornell Institute for China Economic Research (CICER) Cornell East Asian Program (EAP) Regional Science Association International (RSAI) International Association for China Planning (IACP)

# Language Skills & Technical Competencies

**Software** ArcGIS; QGIS; Mapbox; ENVI; Google Earth Engine (GEE), IMPLAN; Microsoft Office

**Coding** Python; R, Stata, MATLAB, C++, C#, Java, IDL

Languages English, Mandarin