# Wenjing Gong

(Updated on 06/2025)

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## **EDUCATION**

2024 - Ph.D. Student, Urban and Regional Science

Texas A&M University, College Station, USA

Advisor: Dr. Xinyue Ye

2019 - 2022 M.E., Architecture (Urban Study)

Tongji University, Shanghai, China

GPA: 88.5/100 (Entrance through the exam-free recommendation program)

2019 Visiting Student, Graduate School of Architecture, Planning and Preservation

Columbia University, New York, USA

2014 - 2019 B.E., Architecture

Shandong University of Science & Technology, Qingdao, China

GPA: 90.5/100 (Rank: 1/60 each year)

## **ACADEMIC & PROFESSIONAL EXPERIENCE**

2025 Student Fellow

Telehealth Institute, Texas A&M University, College Station, USA

2024 - 2025 Research Assistant

Advisor: Dr. Xinyue Ye, Center for Geospatial Sciences, Applications and Technology,

Texas A&M University, College Station, USA

2022 - 2024 Designer and Planner

Architecture Design & Research Institute of Tongji University, Shanghai, China

2020 Teaching Assistant

Department of Urban Planning, Tongji University, Shanghai, China

## RESEARCH INTERESTS

- GIScience, GeoAI, Urban Analytics, Urban Planning
- Climate Resilience, Environmental Health, Public Health
- Human Mobility, Travel Behavior, Transportation

## PEER-REVIEWED PUBLICATIONS

Ye, X., Li, S., **Gong, W.\***, Li, X., Li, X., Dadashova, B., Li, W., Du, J., & Wu, D. (2025). Street View Imagery in Traffic Crash and Road Safety Analysis: A Review. *Applied Spatial Analysis and Policy*, 18(2), 50. <a href="https://doi.org/10.1007/s12061-025-09653-7">https://doi.org/10.1007/s12061-025-09653-7</a>

Ye, X., Yigitcanlar, T., Xu, Y., Head, M., Hang, Y., Sanchez, T., **Gong, W.**, & Niyogi, D. (2025). Urban planning and IPCC-like city assessments integration for climate-resilient cities.

- Environment and Planning B, 23998083251330940. https://doi.org/10.1177/23998083251330940
- Ye, X., Yigitcanlar, T., Goodchild, M., Huang, X., Li, W., Shaw, S.-L., Fu, Y., **Gong, W.**, & Newman, G. (2025). Artificial intelligence in urban science: Why does it matter? *Annals of GIS*, 0(0), 1–9. <a href="https://doi.org/10.1080/19475683.2025.2469110">https://doi.org/10.1080/19475683.2025.2469110</a>
- Gong, W., Lee, C. S., Li, S., Adkison, D., Li, N., Wu, L., & Ye, X. (2025). Cyber victimization in hybrid space: An analysis of employment scams using natural language processing and machine learning models. *Journal of Crime and Justice*, 1–22. <a href="https://doi.org/10.1080/0735648X.2024.2448804">https://doi.org/10.1080/0735648X.2024.2448804</a>
- Gong, W., Rui, J., & Li, T. (2024). Deciphering urban bike-sharing patterns: An in-depth analysis of natural environment and visual quality in New York's Citi bike system. *Journal of Transport Geography*, 115, 103799. https://doi.org/10.1016/j.jtrangeo.2024.103799
- Gong, W., Huang, X., White, M., & Langenheim, N. (2023). Walkability Perceptions and Gender Differences in Urban Fringe New Towns: A Case Study of Shanghai. *Land*, 12(7), 1339. <a href="https://doi.org/10.3390/land12071339">https://doi.org/10.3390/land12071339</a>

## **Selected Under Review Papers:**

- Gong, W., Ye, X., Wu, K., Jamonnak, S., Zhang, W., Yang, Y., Huang, X. Integrating Spatiotemporal Vision Transformer into Digital Twins for High-Resolution Heat Stress Forecasting in Campus Environments (Under revision in *Journal of Planning Education and Research*)
- Ye, X., Gong, W., Yang, Y., Zou, L., Tu, Z., Huang, X., Li, Z., Ning, H., Wu, L. Towards Agentic Urban Digital Twins (AUDiTs): Advancing New Urban Science through Human-Centric LLM Agents (Under review in 33rd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems)
- Yang, Y., Zou, L., **Gong, W.**, Ye, X., Zhou, B., Wang, S. DisasterVLP: Perceiving Multidimensional Disaster Damages from Street-View Images Using Visual-Language Models (Under review in 33rd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems)
- Rui, J., **Gong, W.** Paying lip service? An investigation into the spatial mismatch between younger and older adults' streetscape perceptual preference and visitation behavior (Under review in *Cities*)
- Rui, J., **Gong, W.**, Qin, L. A geo-embedded graph neural network framework for ride-hailing demand: Interpretable modeling of spatiotemporal dynamics driven by street contextual features (Under review in *Journal of Transport Geography*)
- Rui, J., Shao, C., Hu, Z., **Gong, W.**, Li, X. Concerned with green scarcity or inequity? The impact of the quantity and equity of urban green space on green satisfaction and associated socioeconomic drivers (Under review in *Journal of Geographical Sciences*)

## **PRESENTATIONS**

#### Conferences

Gong, W., Ye, X., Wu, K., Jamonnak, S., Zhang, W., Yang, Y., Huang, X. Integrating

- Spatiotemporal Vision Transformer into Digital Twins for High-Resolution Heat Stress Forecasting in Campus Environments. 2025 Annual Meeting of American Association of Geographers, March 24-28, 2025, Detroit, Michigan, USA (Oral).
- Gong, W., Yang, Y., Zhang, W., Wu, K., Ye, X., Huang, X. Integrating high-resolution simulations and transformer network predictions for mitigating human heat stress: A digital twin of a Texas campus. *2024 Texas Weather Conference*, November 9, 2024, College Station, Texas, USA (Oral).
- Gong, W., Yang, Y., Zhang, W., Wu, K., Ye, X., Huang, X. Integrating high-resolution simulations and transformer network predictions for mitigating human heat stress: A digital twin of a Texas campus. *College of Architecture's 26th Annual Showcase*, October 3, 2024, Texas A&M University, College Station, Texas, USA (Poster).
- Gong, W. Simulating and Predicting Spatial-Temporal Human Outdoor Heat Exposure: A Case Study on a Texas Campus. *The 2024 Symposium on Spatiotemporal Data Science: GeoAI for Social Sciences*, July 24, 2024, Virtual (Abstract accepted).

## Workshops

- Gu, J., **Gong, W**., Zhang, X. Analysis of the Spatial Distribution of Express Courier Stations and Assessment of Site Selection Effectiveness. *DigitalFUTURES 12<sup>th</sup> Summer Workshops*, July 2, 2022, Virtual (Oral).
- Gong, W., Huang, H., Zhang, X. Undoing Sprawl: Urban Agriculture as a Social Innovation. Resizing the Urban Form in the Era of "Negative Population Growth" Workshop, December 9, 2019, Columbia University, New York City, USA (Oral).

#### **AWARDS & HONORS**

- Ashok K. Dutt Award for Best Graduate Student Paper (1st place), Regional Development and Planning Specialty Group, 2025 Annual Meeting of American Association of Geographers, \$200.
- 2025 UCGIS I-GUIDE 2024-2025 Community Champions Cohort (Student leader).
- 2025 Travel Grant, LAUP Department, TAMU, \$600.
- 2024 2028 Research Assistantship covering stipend and tuition, Center for Geospatial Sciences, Applications and Technology, TAMU.
- 2019 2022 Academic Scholarship covering all tuition fees, TJU.
- 2014 2019 First-class Scholarships in academic performance (5%, 8 times), SDUST.
- 2014 2019 First-class Corporate Scholarships (5%, 2 times), SDUST.
- 2014 2019 "Outstanding Student Pioneer" (5%, 3 times), SDUST.
- 2019 "Outstanding Graduate" of Shandong Province (5%).
- "Outstanding Student" in Science, Technology, and Innovation (5%), SDUST.
- 2018 Gold Award, SINO-JAPAN Art & Design Exchange Exhibition.
- 2018 National Best Leader Award, National Green Building Design Competition.
- 2018 Grand Prize, National Green Building Design Competition Deep Green Category.
- 2018 First Prize, The Fourth Academy Award National Art and Design Exhibition.
- 2018 Gold Award, Chinese Creative Design Annual 2016/2017.

| 2018 | Silver Award, The Third Bauhaus Award International Design Competition.             |
|------|---|
| 2018 | Bronze Award, Exhibition of Architectural Design in Developing Countries.           |
| 2018 | Excellent Award, Shandong Province College Student Construction Design Competition. |
| 2017 | Excellence Award, China Architectural Education/TSINGRUN Award Students' Paper      |
|      | Competition.  |
| 2017 | Bronze Award, The 3rd Mainland, Taiwan and Hongkong Design Invitation Exhibition.   |
| 2017 | Second Prize, National Green Building Design Competition - Green Category.          |
| 2016 | Excellent Award, National Green Building Knowledge Competition for Youth Students.  |
| 2016 | Excellent Market Potential Award, Lion Award International Industrial Design        |
|      | Competition – "Innovative Application Design Group: Industrial Robot Systems".      |
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## **SERVICES**

#### **Invited Reviewer**

- International Journal of Geographical Information Science (2)
- Journal of Transport Geography (1)
- Journal of Planning Education and Research (1)
- Applied Spatial Analysis and Policy (1)
- Computational Urban Science (1)
- Forum Geografi (1)

#### **Editorial Boards**

• Managing Editor: Computational Urban Science

## **Conference Organizations**

 Session Chair/Primary Organizer: Symposium on Human Dynamics Research: Urban Environmental Intelligence and Human-Climate Interactions. 2025 Annual Meeting of American Association of Geographers, March 24-28, 2025, Detroit, Michigan, USA.

## **MEDIA COVERAGE**

• Throwing Shade at Heatwaves: Tracking campus "hot spots" could help students stay cool in the Texas heat. <a href="https://engineering.tamu.edu/news/2024/09/throwing-shade-at-heatwaves.html">https://engineering.tamu.edu/news/2024/09/throwing-shade-at-heatwaves.html</a>

# **SKILLS**

- Programming: Python (Data Processing, Visualization, and Analysis), SQL, HTML
- Machine Learning/Deep Learning: Computer Vision (Semantic/Instance Segmentation), Time series Forecasting (LSTM, Transformer), Tree models, Explainable AI (SHAP)
- Spatial Data Analysis: ArcGIS Pro, QGIS, Geoda, MGWR 2.2
- Urban Climate Simulation: SOLWEIG, Envi-met
- Design and Planning: AutoCAD, SketchUp, Rhino, Photoshop, Illustrator, InDesign, Enscape, Lumion