

# Jian LIU

College of Resource Environment and Tourism, Capital Normal University

No.105 West 3rd Ring Road North, Beijing, China, 100048

E-mail: [jianliu24@163.com](mailto:jianliu24@163.com) / [felix.jianliu@gmail.com](mailto:felix.jianliu@gmail.com)

Tel: +(86) 15801151683

Homepage: <https://jianliu-24.github.io/>

## EDUCATION

---

09/2019 – 06/2022

### **Master of Human Geography**

*College of Resource Environment and Tourism, Capital Normal University  
(Beijing, China)*

**Major courses:** *Application of GIS in Human Geography, Regional Economics, Urban and Regional Planning, The Mathematical and Physical Fundamentals of Earth Science.*

09/2015 - 06/2019

### **Bachelor of Human Geography and Urban Planning**

*College of Geography and Environmental Science, Northwest Normal University (Lanzhou, China)*

**Major courses:** *Human Geography, Urban Geography, Geographic Information System, Economic Geography, Principles of Urban Planning.*

## RESEARCH INTERESTS

---

- Travel behaviors and activity space
- Human mobility & urban dynamics
- Complex network and urban structure
- Geographic big data analytics and mining

## PUBLICATIONS

---

1. **Liu, J.**, Meng, B., Yang, M., Peng, X., Zhan, D., & Zhi, G. (2022). Quantifying spatial disparities and influencing factors of home, work, and activity space separation in Beijing. *Habitat International*, 126, 102621.
2. Liu, H., **Liu, J.**, Li, M., Gou, P., & Cheng, Y. (2022). Assessing the evolution of PM2. 5 and related health impacts resulting from air quality policies in China. *Environmental Impact Assessment Review*, 93, 106727. (Corresponding author)
3. **Liu, J.**, Meng, B., Wang, J., Chen, S., Tian, B., & Zhi, G. (2021). Exploring the Spatiotemporal Patterns of Residents' Daily Activities Using Text-Based Social Media Data: A Case Study of Beijing, China. *ISPRS International Journal of Geo-Information*, 10(6), 389.
4. **Liu, J.**, Meng, B., Chen, S., Chen, Z., & Zhan, D. (2021). Study on the Relationship between Dining Activities of Beijing Residents and Urban Space based on Multi-sources Big Data. *Human Geography*, 36(2), 63-72+183. (in Chinese)
5. Chen, S., Meng, B., Liu, N., Qi, Z., **Liu, J.**, & Wang, J. (2022). Cultural Perception of the Historical and Cultural Blocks of Beijing Based on Weibo Photos. *Land*, 11(4), 495.

6. Wang, B., Meng, B., Wang, J., Chen, S., & **Liu, J.** (2021). Perceiving Residents' Festival Activities Based on Social Media Data: A Case Study in Beijing, China. *ISPRS International Journal of Geo-Information*, 10(7), 474.
7. Tian, B., Meng, B., Wang, J., Zhi, G., Qi, Z., Chen, S., & **Liu, J.** (2022). Spatio-Temporal Patterns of Fitness Behavior in Beijing Based on Social Media Data. *Sustainability*, 14(7), 4106.
8. Zhi, G., Meng, B., Wang, J., Chen, S., Tian, B., Ji, H., ... & **Liu, J.** (2021). Spatial Analysis of Urban Residential Sensitivity to Heatwave Events: Case Studies in Five Megacities in China. *Remote Sensing*, 13(20), 4086.
9. Zhan, D., Zhang, Q., Kwan, M.P., **Liu, J.**, Zhan, B., & Zhang, W. (2022). Impact of urban green space on self-rated health: Evidence from Beijing. *Frontiers in Public Health*, 3025.
10. Zhu, Y., Wang, J., Meng, B., Ji, H., Wang, S., Zhi, G., **Liu, J.**, & Shi, C. (2022). Quantifying spatiotemporal heterogeneities in air pollution-related health and associated determinants using geospatial big data: a case study in Beijing. *Remote Sensing*, 14(16), 4012.
11. Yang, T., **Liu, J.**, Meng, B., Zhang, S., Wang, J., Ji, H., Zhi, G., & Chen, S. Understanding tourist mobility and spatiotemporal behaviors in Beijing based on user-generated content data. *Applied Geography*. (Under review)
12. Zhi, G., Meng, B., **Liu, J.**, Yang, T., Chen, S., Tian, B., Zhang, S., & Wang, J. The rhythms of citizens' leisure and recreation: A case study based on social media data. *Tourism Management Perspectives*. (Under review)

## RESEARCH PROJECTS

---

09/2019 - Present	<p><b>The National Key Research and Development Program of China</b></p> <p><i>Project name:</i> Geographic Big Data Mining and Spatiotemporal Pattern Discovery. (Grant Nos. 2017YFB0503605)</p> <p><i>Contribution:</i> Data processing, Spatial analysis, Report writing.</p>
09/2019 - Present	<p><b>National Natural Science Foundation of China Project</b></p> <p><i>Project name:</i> Jobs-housing Separation Patterns, Measurement, Early Warning and Planning Response in the Context of Functional Reorganization. (Grant Nos. 51878052)</p> <p><i>Contribution:</i> Spatial analysis, Visualization, Report writing.</p>
09/2019 - 12/2020	<p><b>National Natural Science Foundation of China Project</b></p> <p><i>Project name:</i> Study on the Spatial matching measurement and patterns of urban elements. (Grant Nos. 41671165)</p> <p><i>Contribution:</i> Data processing, Spatial analysis, Visualization and Report writing.</p>

12/2020 – 07/2021

**WeSpace Academic Support Plan in 2020: “Tsinghua-Tencent” Emerging Technologies × Future Urban Space project**

**Project name:** *The impact of emerging technologies on future urban space under the trend of urbanization*

**Contribution:** *Proposal and Report writing.*

## CONFERENCES

---

### Presentations

1. “Study on the Relationship between Dining Activities of Beijing Residents and Urban Space based on Multi-sources Big Data,” *The 15<sup>th</sup> Conference on Spatiotemporal Behavior and Planning*. Shenzhen, China. December 13-15, 2019.
2. “Study on the Relationship between Residents' Daily Activities and Urban Spatial Structure Based on Social Media Data,” *The Symposium of Research Frontiers on Urban Space and Resident Behavior in Beijing*, Beijing, China. December 25, 2019.
3. “Urban Residents’ Activity Diversity and Its Influential Factors in Beijing,” *The 16<sup>th</sup> Conference on Spatiotemporal Behavior and Planning*. XiaMen, China. December 12, 2020.
4. “The Paradigm of Spatiotemporal Behavior Research in the Big Data Era,” *The Geographical Society of China Annual Spring Conference 2021*, Xi’an, China. May 28-30, 2021.
5. “The Characteristics and Influencing Factors of Spatial Separation of “Live-Work-Activity” in Beijing,” *The 11<sup>th</sup> Forum on Spatially Integrated Humanities and Social Science*, Hangzhou, China. July 7-10, 2021.
6. “Mining the Residents’ Daily Activity Patterns of Beijing from the Perspective of Behavioral Sensing,” *2021 China Behavioral Geography Annual Conference and the 17<sup>th</sup> Conference on Spatiotemporal Behavior and Planning*, Wuhan, China, November 20-21, 2021.

### Participated conferences

1. 27/10/2019: *Workshop on Complex Systems and Social Computing*. Beijing, China.
2. 31/10/2019 - 3/11/2019: *2019 China Conference on Geography*. Beijing, China.
3. 8/05/2020 - 9/05/2020: *2020 ACM SIGSPATIAL CHINA Conference of Spatial Data Intelligence*. (Online)
4. 10/05/2020: *The 16<sup>th</sup> China Networks Science Forum in 2020*. (Online)
5. 22/08/2020 - 23/08/2020: *China National Conference on Big Data & Social Computing, BDSC 2020*. (Online)

## SKILLS

---

### Software Skills:

Spatial Analysis: ArcGIS (Pro), QGIS, GeoDa, CrimeStat, SatScan, Geodetector.

Statistical Analysis: Tableau, SPSS, Origin.

Network Analysis: Gephi, Ucinet.

Others: Adobe Photoshop, Illustrator, Indesign & Premiere, AutoCAD, SketchUp.

**Language:** IELTS 6.5

**Programming Language:** Python, R.

**Other Skills:** Fieldwork, Questionnaire Survey, In-depth Interview.

## AWARDS

---

Outstanding Postgraduates Awards in Beijing. (2022)

Presidential Scholarship of Capital Normal University. (2022)

National scholarship for Postgraduates. (2021)

Individual Scholarship for Postgraduate of Capital Normal University. (2021)

Second-class Scholarship for Postgraduate of Capital Normal University. (2021)

National Encouragement Scholarship. (2017-2018)

## SERVICE

---

Manuscript Reviews for Peer-reviewed Journals:

- [1] ISPRS International Journal of Geo-Information;
- [2] Land;
- [3] Environment, Development and Sustainability
- [4] Sustainability.