

Shiyan Sha

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EDUCATION

Harbin Institute of Technology (Project 211 and 985/“Double First-Class” initiative) Harbin, China
Master of Philosophy in Urban and Rural Planning. Sep. 2021-Mar. 2024

- **Average score:** 86.9/100
- **Honors:** First-class Scholarship (Top 5%); Outstanding Student Award (Top 10%); Excellent Dissertation Proposal (Top 10%)
- **Core Courses:** Planning Design Research (88/100); Urban Planning Theory (93/100); Application of Geographic Information and Remote Sensing Analysis (88/100); Design Research (95/100)

Hebei University of Technology (Project 211/“First-class Disciplines”) Tianjin, China
Bachelor of Engineering in Urban and Rural Planning. Sep. 2016-Jun. 2021

- **GPA:** 3.77/4.00 | **Average score:** 89.0/100 | **Ranking:** 2/58 (Top 3%)
- **Honors:** First-class Scholarship (Top 5%); Outstanding Graduate Award (Top 10%)
- **Core Courses:** Urban Planning and Design (94/100); History of Urbanism and Planning (97/100); Principles of Urban and Rural Planning (96/100); Urban and Rural Regional Planning (94/100); Urban Sociology (92/100); Urban Geography (93/100)

Joint Course for Landscape and Urban Environment Research. Beijing, China
(Peking University, The University of Hong Kong, South China University of Technology) Aug. 2024

Summer Course for Advanced Spatial Analysis Methods. Beijing, China
(School of Architecture, Tsinghua University) Jul. 2024

RESEARCH INTERESTS

Globalization: Social Resilience; Regeneration Policy; Regional Inequality; Urban Shrinkage *UN-SDG: 1; 9; 11*
Climate Change: Health Inequality; Health Risk Assessment; Climate Adaption Policy; Health Justice *UN-SDG: 3; 10; 13*

PUBLICATIONS

Journal Articles:

As the First Author

- [1] Cheng, Q., & Sha, S* (**Co-first Author**). Last defense in climate change: Assessing healthcare inequities in response to compound environmental risk in a megacity in Northern China. **Sustainable Cities and Society**, 115, 105886. 2024
<https://doi.org/10.1016/j.scs.2024.105886> *(SCIE JCR Q1 IF=11.7)*
- [2] Sha, S. et al. Building a “reservoir of social resilience:” A strategy for social infrastructure regeneration in shrinking cities based on social network analysis. **Habitat International**, 143, 102991. 2024
<https://doi.org/10.1016/j.habitatint.2023.102991> *(SSCI JCR Q1 IF=6.8)*
- [3] Sha, S., & Cheng, Q*. Built or Social environment? Effects of perceptions of neighborhood green spaces on resilience of residents to heat waves. **Urban Forestry & Urban Greening**, 94, 128267. 2024
<https://doi.org/10.1016/j.ufug.2024.128267> *(SCIE/SSCI JCR Q1 IF=6.4)*
- [4] Sha, S., & Cheng, Q*. Determining the effects of green space usage on health inequalities among residents of shrinking cities based on a social capital perspective. **Urban Forestry & Urban Greening**, 97, 128375. 2024
<https://doi.org/10.1016/j.ufug.2024.128375> *(SCIE/SSCI JCR Q1 IF=6.4)*

As the Corresponding Author

- [5] Cheng, Q., & Sha, S*. Revealing the injustice and factors that affect the resilience responses of residents in the full period of heat waves. **Sustainable Cities and Society**, 107, 105467. 2024
<https://doi.org/10.1016/j.scs.2024.105467> *(SCIE JCR Q1 IF=11.7)*

- [6] Cheng, Q., & Sha, S*. Resisting the heat wave: Revealing inequalities in matching between heat exposure risk and healthcare services in a megacity. **Applied Geography**, 167, 103291. 2024
<https://doi.org/10.1016/j.apgeog.2024.103291> (SSCI JCR Q1 IF=4.9)
- [7] Cheng, Q., Sha, S*, & Cheng, W. Revealing the heterogeneity of social capital in shrinking cities from a social infrastructure perspective: Evidence from Hegang, China. **Applied Geography**, 159, 103087. 2023
<https://doi.org/10.1016/j.apgeog.2023.103087> (SSCI JCR Q1 IF=4.9)
- [8] Lu, M., Sha, S*, & Cheng, Q. The Inspirations of Action-Oriented Social Infrastructure Regeneration Practices: A Case Study of Bayside City, Australia. **Urban Planning International (UPI)**. 2023
<https://doi.org/10.19830/j.upi.2023.077> (CSSCI IF=5.2)

As a Co-author

- [9] Bian, G., ..., Sha, S., & Zhen, M*. Effects of thermal environment and air quality on outdoor thermal comfort in urban parks of Tianjin, China. **Environmental Science and Pollution Research**, 30(43), 97363–97376. 2023
<https://doi.org/10.1007/s11356-023-29130-3> (SCIE JCR Q1 IF=5.8)
- [10] Bian, G., ..., Sha, S., & Zhen, M*. Effects of landform and building layout on outdoor thermal environment: A case study of mountain villages in severely cold regions. **Journal of Asian Architecture and Building Engineering**. 2024
<https://doi.org/10.1080/13467581.2024.2389162> (SCIE/AHCI JCI Q1 IF=1.5)

Conference Papers:

- [1] Sha, S. et al. Differentiation of family medical resources use of “New Citizens” from the perspective of health equity. **Proceedings of the 58th ISOCARP Congress**. Brussels: Isocarp, 2022. 2022
<https://doi.org/10.47472/z2r9J3Q4> (Presentation)
- [2] Sha, S. et al. Theoretical Responses and Regeneration Strategies for Social Infrastructure in Shrinking Cities [C]. **Proceedings of the 2023 China Urban Planning Annual Conference (02 Urban Renewal)**; 2023:15. 2023
<https://doi.org/10.26914/c.cnkihy.2023.055866> (Poster)
- [3] Sha, S. et al. Equity-oriented research on the characteristics of socio-spatial differentiation and governance strategies in shrinking cities. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2023 (Presentation)
- [4] Sha, S. et al. Improving social resilience in shrinking cities through social infrastructure regeneration: A investigation from Hegang, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2023 (Presentation)
- [5] Sha, S. et al. Characteristics of “Flash Mob” behavior and cultural transmission in public space based on an inclusive perspective: Evidence from Tianjin City, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2023 (Presentation)
- [6] Sha, S. et al. Spatial Distribution and Usage Characteristics of “Workers’ Harbor” from the Perspective of Opening and Sharing: A Case Study from Tianjin, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2023 (Presentation)
- [7] Cheng, Q., Sha, S., Cheng, W., & Lu, M. The thermal environmental characteristics and climate-responsive planning of “Rural Communities” in severe cold regions: Evidence from Zhangjiakou, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2024
- [8] Cheng, Q., Sha, S., Cheng, W., & Lu, M. Social infrastructure demand evaluation and planning policies of historical communities from a resilience perspective: Evidence from typical communities in Hebei, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2024
- [9] Cheng, Q., Sha, S., Cheng, W., & Lu, M. Evaluation of urban community healing space demand and planning strategies from a health equity perspective: Evidence from Tianjin, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2024
- [10] Cheng, Q., Sha, S., Cheng, W., & Lu, M. Comparison of the spatial and temporal distribution characteristics of the “Informal Economy” in the context of multi-sector collaboration and governance: Evidence from Tianjin, China. **Proceedings of the 59th ISOCARP Congress**. Toronto: Isocarp, 2023. 2024
- [11] Meng, Q., Lu, M., Sha, S., & Yang, Z. Holistic Identification and Optimization of Basin Ecological Infrastructure Based on a Quantitative Analysis Framework. **Proceedings of the 58th ISOCARP Congress**. Brussels: Isocarp, 2022. 2023
<https://doi.org/10.47472/ZsRdcv5E>

Master’s Thesis:

Sha, S. Research on the Regeneration of Social Infrastructure in Shrinking Cities from the Perspective of Social Capital [D]. Harbin Institute of Technology. 2024

RESEARCH EXPERIENCES

Projects:

- Writing and Editing of the Book “Science of City Planning” (In Chinese) Sep. 2021-Mar. 2024
 - Contributed to the collection, writing, and editing of content, including chapters on urbanization, urban development laws, urban social systems, and rural planning strategies, contributing approximately 100,000 words.
- Participated in Layout Plan for Healthcare Facilities in Tianjin (2019-2035) Dec. 2019-Sep. 2020
 - As a core member, contributed to data organization, analysis, and GIS mapping. Proposed policies and spatial strategies to address inequalities in healthcare facilities distribution.
- Participated in the National Natural Science Foundation of China (NSFC) projects. Mar. 2023
 - Participated in a research project focused on green space regeneration and its socio-ecological benefits in Hegang. Explored spatial differentiation of social capital generated by green spaces and the resulting health inequalities using UCINET, SPSS, and GIS.
- Participated in projects funded by the Humanities and Social Sciences Foundation of the Ministry of Education of China. Jun. 2020-Sep. 2020
 - As a team leader, conducted questionnaire distribution and interviews in 20 communities in Tianjin's green spaces. Through statistical analysis, explored the role of green spaces in enhancing residents' ability to cope with heatwaves.

Competitions:

- Research Report on Urban and Rural Social Practice for Urban and Rural Planning Majors in China. Oct. 2019
 - Awarded Second Prize as the first author. Conducted a questionnaire survey and data analysis of the Tianjin Workers’ Harbor to understand the demands of outdoor workers and develop design strategies for shared and open spaces.
- Excellent Urban Design Assignments for Urban and Rural Planning Majors in China. Oct. 2019
 - Awarded Third Prize as the first author. Conducted a month-long in-depth survey and proposed a micro-regeneration strategy of “co-creation and co-management” to revitalize a historic district in Liaocheng City, China.

CERTIFICATES

- Journal Reviewer Certificates: Nov. 2023-Present
 - Sustainable Cities and Society (SCIE JCR Q1 IF=11.7)
 - Applied Geography (SSCI JCR Q1 IF=4.9)
 - Health & Place (SCIE/SSCI JCR Q1 IF=4.8)
 - International Journal of Digital Earth (SCIE JCR Q1 IF=3.7)
 - Heliyon (SCIE JCR Q2 IF=4.0)
- Member of ISOCARP Jun. 2023-Present
(International Society of City and Regional Planners).
- Co-founder of the “Yingcheng Society” Dec .2017-Present
(An urban studies academic society in Hebei University of Technology).

SKILLS

- Quantitative:** Statistical Analysis (R, Python, SPSS), Geospatial Analysis (ArcGIS, ENVI, Geoda), Visualization (Origin, LaTeX).
- Qualitative:** Semi-structured Interviews, Questionnaire Design and Analysis, Social Network Analysis.