

Jia Siqu

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ACADEMIC QUALIFICATIONS

The Hong Kong Polytechnic University 01/2019 - 01/2023

Degree: Doctor of Philosophy

GPA: 3.64/4.00 Major: Civil and Environmental Engineering

National University of Singapore 08/2021 - 12/2021

Degree: Non-Degree Exchange Program

Major: Design and Engineering; Urban Climate; Architectural Design

Chinese University of Hong Kong 09/2017 - 06/2018

Degree: Master of Science

GPA: 3.67/4.00 Major: GRM (geography & resource management)

- Honors: Being placed on the Dean's list (2017-2018)

Shandong Normal University 09/2013 - 06/2017

Degree: Bachelor of Science

GPA: 3.39 /4.00 Major: Geographic Information Science

- Honors: The first-class scholarship (2014-2017)

PREVIOUS / PRESENT ACADEMIC POSITIONS

The Hong Kong Polytechnic University

Postdoc Research Fellow

02/2023 to now

Research Associate

01/2022 - 01/2023

Research Assistant

08/2018 - 12/2018

Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

Research Assistant

08/2016 - 05/2017

REPRESENTATIVE PUBLICATIONS

[1] Jia, S., Wang, Y., Chen, L., & Bi, X. (2023). A novel approach to estimating urban land surface temperature by the combination of geographically weighted regression and deep neural network models. *Urban Climate*, 47, 101390.

[2] Jia, S., Wang, Y., Wong, N. H., Chen, W., & Ding, X. (2022). Influences of the thermal environment on pedestrians' thermal perception and travel behavior in hot weather. *Building and Environment*, 226, 109687.

[3] Jia, S., & Wang, Y. (2022). Comparison of Different Blue-Green Infrastructure Strategies in Mitigating Urban Heat Island Effects and Improving Thermal Comfort. In *Construction Research Congress 2022* (pp. 357-366).

[4] Jia, S., & Wang, Y. (2021). Effect of heat mitigation strategies on thermal environment, thermal comfort, and walkability: A case study in Hong Kong. *Building and Environment*, 107988.

[5] Jia, S., & Wang, Y. (2020). Effects of land use and land cover pattern on urban temperature variations: A case study in Hong Kong. *Urban Climate*, 34, 100693.

[6] Jia, S., Wang, C., Li, Y., Zhang, F., & Liu, W. (2017). The urbanization efficiency in Chengdu City: An estimation based on a three-stage DEA model. *Physics and Chemistry of the Earth*, 101, 59-69.

[7] Wang, Y., Jia, S., Wang, Z., Chen, Y., Mo, S., & Sze, N. N. (2021). Planning considerations of green corridors for the improvement of biodiversity resilience in suburban areas. *Journal of Infrastructure Preservation and Resilience*, 2(1), 1-15.

[8] Chen, L., Wang, Y., Jia, S., & Siu, M. F. F. (2021). Development of panoramic infrared images for surface

temperature analysis of buildings and infrastructures. *Energy and Buildings*, 232, 110660.

[9] Zhang, F., Zhan, J., Li, Z., **Jia, S.**, & Chen, S. (2018). Impacts of urban transformation on water footprint and sustainable energy in Shanghai, China. *Journal of Cleaner Production*, 190, 847-853.

[10] Deng, X., Gibson, J., & **Jia, S.** (2018). Does expressway consume more land of the agricultural production base of Shandong province?. *Computational economics*, 52(4), 1293-1316.

Under review:

[1] **Jia, S.**, Wang, Y., Tan, C., Weng, Q., Yoo, C., Chen, W. & Ding, X. (2023). Multiscale Estimation of the Cooling Effect of Urban Greenspace in Subtropical and Tropical Cities. *Urban Forestry & Urban Greening*.

[2] **Jia, S.**, Wang, Y., Wong, N., Tan, C. & Chen, S. (2023). Estimation of mean radiant temperature across different outdoor spaces: A comparative study from field measurement to modeling. *Energy and Buildings*.

PROJECTS & AWARDS

Urban Nature Labs (UNaLab) **2019 - 2021**

Participant

- Funded by the European Commission (EC)'s Horizon 2020 Research Scheme, Hong Kong RGC

Full scholarship **2019 - 2021**

- Funded by the Hong Kong Government and The Hong Kong Polytechnic University

Dean's list **2017 - 2018**

- Evaluated by the Chinese University of Hong Kong

SUPERVISION EXPERIENCE

(1) Obtained the Certificate of Becoming an Effective Teaching Assistant In 2019.

(2) Conducted supporting teaching activities during the PhD period and work period,

- Supervised undergraduate students and master students with their FYP (final-year projects);
- Conducted supporting teaching activities, e.g., marking the assignments, discussing with students, and guiding them on on-site surveys.

LANGUAGE & SKILLS

Languages:

- Mandarin (native)
- English (fluent): Highly proficient in both written and spoken English.

Highlights of Skills:

- **Interdisciplinary research background and interests**
 - Sustainability; Urban Climate; Urban Heat Island; Urban Planning; GIS; Remote Sensing; Outdoor Thermal Comfort; Green Infrastructure; Neural Network; Agent-based Simulation.
- **Proficient in using a wide range of professional software**
 - GIS & Remote sensing: ArcGIS, ENVI, ERDAS, QGIS.
 - Architecture & Urban planning: AutoCAD, 3D Max, SketchUp.
 - Urban microclimate simulation: ENVI-met, SOLWEIG, Rayman.
 - Energy consumption simulation: EnergyPLUS.
 - Statistical data processing: MatLab, SPSS.
 - Others: Gabi (for life cycle assessment); Anylogic (for agent-based simulation).