

Jia Siqu

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EDUCATIONAL BACKGROUND

The Hong Kong Polytechnic University **01/2019 to now**

Degree: Doctor of Philosophy

GPA: 3.64/4.00 Major: Civil and Environmental Engineering

(The expected graduation date will be by the end of 2022)

National University of Singapore **08/2021 - 12/2021**

Degree: Non-Degree Exchange Program

Major: Urban Climate; Environmental 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)

RESEARCH INTERESTS

Urban Climate; Urban Heat Island; Urban Planning; GIS; Geoinformation; Remote Sensing; Outdoor Thermal Comfort; Green Infrastructure; Neural Network; Agent-based Simulation.

WORK EXPERIENCE

The Hong Kong Polytechnic University **08/2018 - 12/2018**

Research assistant

- Mainly helped with the project - Urban Nature Laboratory, which aims at adopting nature-based solutions to improve urban environment.
- Assisted data collection and analysis in projects.
- Applied remote sensing data and urban big data for modelling land temperature and land use patterns, simulating microclimate and environmental pollutants.

Institute of Geographic Sciences and Natural Resources Research,

Chinese Academy of Sciences **08/2016 - 04/2017**

Research assistant

- Conducted onsite interview and processed raw data using professional software.
- Participated in the 33rd international geographic congress.
- Published journal papers and book chapters about water footprint, carbon emissions, the relationship between CO₂ emissions and urbanization in China, and the measurement of regional urbanization efficiency.

PUBLICATIONS WITHIN THE PAST FIVE YEARS

[1] 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.

[2] 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.

[3] 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, Parts A/B/C*, 101, 59-69.

- [4] 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.
- [5] 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.
- [6] Zhan, J., Chu, X., Li, Z., **Jia, S.**, & Wang, G. (2019). Incorporating ecosystem services into agricultural management based on land use/cover change in Northeastern China. *Technological Forecasting and Social Change*, 144, 401-411.
- [7] 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.
- [8] Zhan, J., Zhang, F., **Jia, S.**, Chu, X., & Li, Y. (2018). Spatial pattern of regional urbanization efficiency: an empirical study of Shanghai. *Computational Economics*, 52(4), 1277-1291.
- [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] Liu, W., Zhan, J., Li, Z., **Jia, S.**, Zhang, F., & Li, Y. (2018). Eco-efficiency evaluation of regional circular economy: A case study in Zengcheng, Guangzhou. *Sustainability*, 10(2), 453.
- [11] Najmuddin, O., Deng, X., & **Jia, S.** (2017). Scenario analysis of land use change in Kabul River Basin—a river basin with rapid socio-economic changes in Afghanistan. *Physics and Chemistry of the Earth, Parts a/B/C*, 101, 121-136.
- [12] Samie, A., Deng, X., **Jia, S.**, & Chen, D. (2017). Scenario-based simulation on dynamics of land-use-land-cover change in Punjab Province, Pakistan. *Sustainability*, 9(8), 1285.

PROJECTS & AWARDS

Urban Nature Labs (UNaLab)	2019 - 2021
<i>Participant</i>	
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	

LANGUAGE & SKILLS

Languages:

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

Highlights of Skills:

- **Teaching:**
 - Obtained the Certificate of Becoming an Effective Teaching Assistant In 2019.
 - Conducted supporting teaching activities during my PhD studies, such as guiding final-year undergraduate students with their FYP (final-year projects), marking students' assignments, etc.
- **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).
- **Communication & Presentation:**
 - Good at communication and presentation in English.
 - Served as the host of one section in the 33rd International geographic congress.
 - Participated actively in international meetings, including the 33rd international geographic congress; the 3rd International Conference on Remote Sensing Applications in Tropical and Subtropical Areas; EGU General Assembly; Annual project meeting (Urban Nature Labs) in Czech.