

# Jinda Qi

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## EDUCATION

- 2016.07 – 2020.12 Doctor of Philosophy in Built Environment, University of New South Wales, Australia
- 2011.09 – 2014.07 Master of Landscape Architecture, Fujian Agriculture and Forestry University, China
- 2007.09 – 2011.07 Bachelor of Landscape Architecture, Jiangxi Agriculture University, China

## CAREER HISTORY

- 2024.08 – Assistant Professor in Landscape Architecture, Department of Architecture, National University of Singapore, Singapore
- 2024.02 – 2024.08 Lecturer in Landscape Architecture, School of Landscape Architecture, Lincoln University, New Zealand
- 2021.03 – 2024.02 Research Fellow, Department of Architecture, National University of Singapore, Singapore
- 2014.07 – 2015.12 Research Assistant, College of Landscape Architecture and Art, Fujian Agriculture and Forestry University, China

## RESEARCH GRANTS

- 2024.04 – 2024.11 Design technology for a better urban living environment (PI)
- 2024.04 – 2024.11 Making Invisible Kelp Forests Visible in Lyttleton Harbour (Co-PI)
- 2022.09 – 2024.05 Rural Ecological Civilization Construction in Henan Province under the Rural Revitalization Strategy (Co-PI)
- 2022.05 – 2024.05 Ecological Conservation and High-Quality Development in Rural Areas of Henan (Co-PI)
- 2020.11 – 2024.02 Assessment of the Visual Quality of Urban Landscapes in Health Promotion (Collaborator)
- 2019.05 – 2019.10 Assessing the impact of solar photovoltaics and air conditioning waste heat on urban heat island effects (Collaborator)
- 2019.02 – 2019.06 Urban Heat Amelioration Design Guide: Reducing Urban Heat at the Lot Scale in New Developments (Collaborator)

2016.07 –2018.06      Validating and improving the BASIX assessment tool for Low Carbon Dwellings  
(Collaborator)

## PUBLICATIONS

1. **Qi, J.**, Lin, E. S., Tan, P. Y., Zhang, X., ... & Waykool, R. (2024). Applying 3D spatial metrics for landscape planning: Creating and measuring landscape scenarios by a point cloud–based approach. *Ecological Informatics*, 79, 102436.
2. Zhang, X., **Qi, J.\***, Lin, E. S., Tan, P. Y., Ho, R., Sia, A., ... & Olszewska–Guizzo, A. (2024). Towards healthy cities: Modeling restorative potential of urban environments by coupling LiDAR–derived 3D metrics with panorama–based online survey. *Environmental Impact Assessment Review*, 106, 107497.
3. Zhang, X., Lin, E. S., Tan, P. Y., **Qi, J.**, Ho, R., Sia, A., ... & Cao, Y. (2024). Beyond just green: Explaining and predicting restorative potential of urban landscapes using panorama–based metrics. *Landscape and Urban Planning*, 247.
4. **Qi, J.**, He, B\*, Cao, Y., Dong, J., & Lin, E. S. (2023). Risk assessment of terrestrial protected areas to extreme wind hazards : a case study in Queensland, Australia. *Landscape and Urban Planning*, 240, 104888.
5. **Qi, J\*.**, He, BJ. (2023). Urban Heat Mitigation Strategies. In: Cheshmehzangi, A., He, BJ., Sharifi, A., Matzarakis, A. (eds) *Climate Change and Cooling Cities. Urban Sustainability*. Springer, Singapore. (Book Chapter).
6. **Qi, J.**, Lin, E. S\*, Tan, P. Y., Ho, R. C. M., Sia,... & Waykool, R. (2023) Representing the landscape visual quality of residential green spaces in Singapore with 3D spatial metrics, *Urban Forestry & Urban Greening*.
7. Wang, M., Liu, M., Zhang, D., **Qi, J.\***, ... & Tan, S. K. (2023). Assessing and optimizing the hydrological performance of Grey–Green infrastructure systems in response to climate change and non–stationary time series. *Water Research*, 232.
8. Wang, M., Yuan, H., Zhang, D., **Qi, J.\***, ...& Tan, S. K. (2023). Supply–demand measurement and spatial allocation of Sponge facilities for Sponge city construction. *Ecological Indicators*, 148, 110141.
9. Zhang, X., Lin, E. S., Tan, P. Y., **Qi, J.**, & Waykool, R. (2023). Assessment of visual quality of urban green spaces using image–based metrics derived from perceived sensory dimensions. *Environmental Impact Assessment Review*, 102.
10. Zhang, X., Lin, E. S., **Qi, J.**, & Tan, P. Y. (2023). Linking Image–based Metrics to 3D Model–based Metrics for Assessment of Visual Landscape Quality, *Journal of Digital Landscape Architecture*. 8, 167–177.
11. Yao, N., Gu, C., **Qi, J.**, ...& Wang, H. (2023). Protecting Rural Large Old Trees with Multi–Scale Strategies: Integrating Spatial Analysis and the Contingent Valuation Method (CVM) for Socio–Cultural Value Assessment. *Forests*, 15, 18.

12. **Qi, J.\***, Lin, E. S., Tan, P. Y., Ho, R. C. M., Sia,... & Waykool, R. (2022) Development and application of 3D spatial metrics using point clouds for landscape visual quality assessment, *Landscape and Urban Planning*, 228, 104585.
13. **Qi, J.\***, Ding, L., & Lim, S. (2022) A Decision–Making Framework to Support Urban Heat Mitigation by Local Governments, *Resources, Conservation & Recycling*,184, 106420.
14. **Qi, J.\***, Ding, L., & Lim, S. (2022) Application of a decision–making framework for multi–objective optimisation of urban heat mitigation strategies, *Urban Climate*. 47, 101372.
15. He, B. J., Wang, J. S., Zhu, J., & **Qi, J.** (2022). Beating the urban heat: Situation, background, impacts and the way forward in China. *Renewable and Sustainable Energy Reviews*, 161, 112350.
16. **Qi, J.\***, Ding, L., & Lim, S. (2021). Toward cool cities and communities: A sensitivity analysis method to identify the key planning and design variables for urban heat mitigation techniques. *Sustainable Cities and Society*, 75, 103377.
17. Li, W., **Qi, J.\***, Huang, S., Fu, W., Zhong, L., & He, B. J. (2021). A pressure–state–response framework for the sustainability analysis of water national parks in China. *Ecological Indicators*, 131, 108127.
18. Huang, S., **Qi, J.\***, Li, W., Dong, J., & van den Bosch, C. K. (2021). The Contribution to Stress Recovery and Attention Restoration Potential of Exposure to Urban Green Spaces in Low–Density Residential Areas. *IJERPH*, 18(16), 8713.
19. He, B. J., Zhao, D., Xiong, K., **Qi, J.**, Ulpiani, G., Pignatta, G., ... & Jones, P. (2021). A Framework for Addressing Urban Heat Challenges and Associated Adaptive Behaviour by the Public and the Issue of Willingness to Pay for Heat Resilient Infrastructure in Chongqing, China. *Sustainable Cities and Society*, 103361.
20. **Qi, J.\***, Ding, L., & Lim, S. (2020). Planning for cooler cities: A framework to support the selection of urban heat mitigation techniques. *Journal of cleaner production*, 275, 122903.
21. **Qi, J.\***, Ding, L., & Lim, S. (2020). Ontology–based knowledge representation of urban heat island mitigation strategies. *Sustainable Cities and Society*, 52, 101875.
22. Mao, Y., **Qi, J.\***, & He, B. J. (2020). Impact of the heritage building façade in small–scale public spaces on human activity: Based on spatial analysis. *Environmental Impact Assessment Review*, 85, 106457.
23. **Qi, J.\***, He, B. J., Wang, M., Zhu, J., & Fu, W. C. (2019). Do grey infrastructures always elevate urban temperature? No, utilizing grey infrastructures to mitigate urban heat island effects. *Sustainable Cities and Society*, 46, 101392.
24. He, B., Zhu, J.\* , Zhao, D., Gou, Z., **Qi, J.**, & Wang, J. (2019). Co–benefits Approach: Opportunities for Implementing Sponge City and Urban Heat Island Mitigation. *Land use policy*, 86, 147–157.
25. Wang, M\*., Zhang, D., Lou, S., Hou, Q., Liu, Y., Cheng, Y., **Qi, J.**, and Tan, S.K., (2019). Assessing hydrological effects of bioretention cells for urban stormwater runoff in response to climatic changes. *Water*, 11(5), p.997.
26. Fu, W., Chen, Z., Zhu, Z., Liu, Q., van den Bosch, C., **Qi, J.**, ... & Dong, J.\* (2018). Spatial and Temporal Variations of Six Criteria Air Pollutants in Fujian Province, China. *IJERPH*, 15(12), 2846.

27. Wang, M\*, Zhang, D., Li, Y., Hou, Q., Yu, Y., **Qi, J.**, ... & Cheng, Y. (2018). Effect of a Submerged Zone and Carbon Source on Nutrient and Metal Removal for Stormwater by Bioretention Cells. *Water*, 10(11), 1629.
28. Fu, W., Liu, Q., Konijnendijk van den Bosch, C., Chen, Z., Zhu, Z., **Qi, J.**, ... & Dong, J.\* (2018). Long-Term Atmospheric Visibility Trends and Their Relations to Socioeconomic Factors in Xiamen City, China, *IJERPH*, 15(10).
29. Li, W., He, B. J., **Qi, J.**, & Dong, J.\* (2018). Water Conservation Scenic Spots in China: Developing the Tourism Potential of Hydraulic Projects and Water Resources. *Sustainability*, 10(12), 4509.
30. Huang, S., ..., **Qi, J.**, Chen, Z., Zhu, Z., & Dong, J.\* (2018). Does Adding Local Tree Elements into Dwellings Enhance Individuals' Homesickness? Scenario-Visualisation for Developing Sustainable Rural Landscapes. *Sustainability*, 10, 3943.
31. Fu, W., Chen, Z., Zhu, Z., Liu, Q., **Qi, J.**, Dang, E., ... & Dong, J.\* (2018). Long-term atmospheric visibility trends and characteristics of 31 provincial capital cities in China during 1957–2016. *Atmosphere*, 9(8), 318.
32. Fu, W. C., **Qi, J.**, Chen, Z. R., Zhu, Z. P., Dong, J. W.\* , & Ding, G. C. (2016). Baili Rhododendron National Forest Park Tour Route Selection during Blooming Period. *Journal of Forest and Environment*, 2016(1),117–123.
33. Fu, W. C., **Qi, J.**, ...& Zhen, Y. (2016). Change characteristics of particulate matter concentration during the blooming period of Rhododendron azalea in Baili Rhododendron Park. *Journal of Northwest Forestry University*, 2016, 288–294.
34. **Qi, J.**, Fu, W. C., Li, W., Lin, S. Y., & Dong, J. W.\* (2015). Landscape Visual Evaluation of Qishan National Forest Park Based on GIS and SBE Method. *Journal of Northwest Forestry University*, 2015130(2), 245–250.

## ACADEMIC SERVICES

### Editorial Board of Journals

- Humanities and Social Sciences Communications
- Heliyon
- Frontiers in Ecology and Evolution
- Frontiers in Environmental Science
- Frontiers in Earth Science

### Guest Editor

- Remote Sensing
- Forests
- Buildings
- Sustainability

- Smart Cities
- Frontiers in Forests and Global Change
- Frontiers in Climate

### **Reviewer of Research Grants**

- National Research, Development and Innovation Office (NRDI), Hungary

### **Competition panel**

- International Solar Building Design Competition 2021
- International Solar Building Design Competition 2020
- International Solar Building Design Competition 2019

### **Reviewer for International Journals and Publications**

- Nature Cities
- Nature Communications
- Landscape and Urban Planning
- Water Research
- Sustainable Cities and Society
- Building and Environment
- Science of the Total Environment
- Urban Forestry & Urban Greening
- Environmental Impact Assessment Review
- Ecological Indicators
- Journal of Cleaner Production
- Humanities and Social Sciences Communications
- npj Urban Sustainability
- Journal of Environmental Management
- Biological Conservation
- Urban Climate
- Artificial Intelligence Review
- Scientific Reports
- Environmental Science and Pollution Research
- Wetlands
- Arabian Journal of Geosciences
- Stochastic Environmental Research and Risk Assessment
- Journal of Urban Management
- Ecosphere
- Heliyon
- Utilities Policy
- International Journal of Geoheritage and Parks

- Urban Science
- Forests
- Sustainability
- Remote Sensing
- Buildings
- Animals
- Minerals
- Energies
- ISPRS International Journal of Geo-Information
- Water
- Land
- Frontiers in Forests and Global Change
- Frontiers in Climate
- Frontiers in Environmental Science
- Frontiers in Earth Science
- Frontiers in Ecology and Evolution
- Frontiers in Public Health

## **TEACHING EXPERIENCES**

- GeoDesign, National University of Singapore, Singapore
- Innovative Design, Lincoln University, New Zealand
- Planting Design and Management, Lincoln University, New Zealand
- Built Environment Vision to Reality, University of New South Wales, Australia
- Construction and Property Economics, University of New South Wales, Australia