Haifeng Niu

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Appointments

2022 –   **University of Cambridge**
             Research Associate (Academic Staff), Department of Land Economy

Education

Ph.D.   Land Economy, University of Cambridge, 2022

M.Phil.   Urban and Rural Planning, Huazhong University of Science and Technology, 2017

B.Sc.   Resource and Environmental Science & Urban-Rural Planning, Sichuan Agricultural University, 2014

Research Grants and Projects

2024-   National Natural Science Foundation of China No.42371290 (¥600,000), Named Researcher

2021-   European Union's Horizon 2020 project – Emotional Cities (€5,000,000), Lead Researcher

2019-20   Tsinghua University–Cambridge University Joint Research Initiative Fund (£10,000), Named Researcher

2018   Centre for Digital Built Britain Mini-projects Programme (£20,000), Co-PI

2017   UN-Habitat project – Improved Urban Public Spaces in China, Researcher

2017   National Natural Science Foundation of China No.51578256 (¥620,000), Named Researcher

Publications

Book Chapters

2021   Silva, E.A., Liu, L., Kwon, H.R., **Niu, H.**, Chen, Y. and Reis, J. 'What's New in Urban Data Analytics?' In: *Applied Data Analysis for Urban Planning and Management*, edited by Alasdair Rae and Cecilia Wong. England: SAGE.

2021   Silva, E.A., Liu, L., Kwon, H.R., **Niu, H.**, Chen, Y. 'Hard and Soft Data Integration in Geocomputation: Mixed Methods for Data Collection and Processing in Urban Planning.' In: *Handbook of Planning Support Science*, edited by Stan Geertman and John Stillwell. doi:10.4337/9781788971089.00010

Journal Articles

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*Corresponding author

2023	**Niu, H.***, Tu, X. and Silva, E. A. 'Using Decision-Tree Methodologies To Explore Determinants Of Health and Wellbeing Outcomes At The Local Authority Scale The Case Study Of London' *Built Environment*, 49(2), 279-297.
2023	**Niu, H.*** and Silva, E. A. 'Understanding Temporal and Spatial Patterns of Urban Activities Across Demographic Groups Through Geotagged Social Media Data.' *Computers, Environment and Urban Systems*, 100. doi:10.1016/j.compenvurbsys.2022.101934
2022	Chen, Y., **Niu, H.***, and Silva, E. A. 'The Road to Recovery: Sensing Public Opinion Towards Reopening Measures with Social Media Data in Post-Lockdown Cities.' *Cities*, 104054. doi:10.1016/j.cities.2022.104054
2021	**Niu, H.*** and Silva, E. A. 'Delineating Urban Functional Use from Points of Interest Data with Neural Network Embedding: A Case Study in Greater London.' *Computers, Environment and Urban Systems*, 88. doi:10.1016/j.compenvurbsys.2021.101651
2020	**Niu, H.*** and Silva, E. A. 'Crowdsourced Data Mining for Urban Activity: Review of Data Sources, Applications, and Methods.' *Journal of Urban Planning and Development*. doi:10.1061/(ASCE)UP.1943-5444.0000566
2017	He, Y., **Niu, H.**, and Deng, W. 'Regional Characteristics of Ancient Villages and Townships Under the Influence of External Mechanism.' *City Planning Review*, (10), p.14.
2016	He, Y., **Niu, H.**, and Qian, H. 'A Research of City Spatial Memory Based on the Event History.' *Urbanism and Architecture*, (16), p.3.

Conference and Invited Talks

Conference Presentation

2023	'Exploring Urban Determinants of Health and Wellbeing: Using Explainable Machine Learning Models' The 17th International Association for China Planning (IACP) Conference, Tianjin University, China. July.
2022	'Systematic review of spatial determinants of urban health: A policy-to-science approach' The 13th International Urban Planning and Environment Congress, Tartu University, Estonia. Aug.
2021	'Delineating fine-scale urban functional use from Points of Interest data with word embedding model.' 13th World Congress of the Regional Science Association International (RSAI) 2018, Virtual, Regional Science Association International. May.
2020	'Delineating fine-scale urban functional use from Points of Interest data with word embedding model.' ACSP 2020 Annual Conference, Virtual, Association of Collegiate Schools of Planning. Nov.
2020	'Delineating Fine-scale Urban Functional Use from Points of Interest Data with Doc2Vec.' GIScience Research UK (GISRUK) Conference, Birkbeck, University of London and University College London. Jul.
2019	'Machine learning the images of a city and informing urban policy making'. Data for Policy 2019: Digital Trust and Personal Data. London, UK. Jun.

Invited Talks

2023	The 3rd Annual Business Meeting of the eMotional Cities project, Michigan State University, US. Sep 10th.

2022	2022 UIBE International Symposium and PhD Forum on Global Government Regulation and Governance in the Digital Era, University of International Business and Economics, China. Dec 17th.
2022	The 2nd Annual Business Meeting of the eMotional Cities project, Tartu University, Estonia. Jul 30th.
2022	Brown Bag Seminar, Department of Land Economy, University of Cambridge, UK.
2021	The 1st Annual Business Meeting of the eMotional Cities project, Virtual.
2019	Peking University-Cambridge University Joint Workshop on Innovations in Urban Governance, University of Peking, China. Dec.
2019	BP 'Quantum Computing for Smart Cities' workshop, Institute for Manufacturing, University of Cambridge, UK. May.
2018	Centre for Digital Built Britain Summer Showcase 2018, Centre for Digital Built Britain, University of Cambridge, UK. Jul.
2018	The Early Career Researchers' Conference 2018, Department of Land Economy, University of Cambridge, UK. Apr.

Teaching Experience

Department of Land Economy, University of Cambridge

2020–21	Going Beyond: Big Data and Urban Policy (Guest Lecturer)
2020–21	RM03: Spatial Analysis and Modelling (Guest Lecturer/Supervisors Coordinator)
2019–20	RM03: Spatial Analysis and Modelling (Guest Lecturer/Supervisors)
2017–18	RM01: Mixed Research Methods Option B (Guest Lecturer/Supervisor)

School of Architecture and Urban Planning, Huazhong University of Science and Technology

| 2016–17 | Graduate Project (Supervisor) |
| 2015–16 | Rural and Urban Design Practice Course (Supervisor) |

Supervising Experience

Ph.D. Dissertation Supervisor, University of Cambridge

Ana Paula Seraphim, PhD in Land Economy Research, 2021

M.Phil. Dissertation Supervisor, University of Cambridge

Qi Chen, MPhil in Land Economy Research, 2022

Xinmeng Tu, MPhil in Land Economy Research, 2021

M.Phil. Dissertation Presentation Panellist, University of Cambridge

M.Phil. in Planning, Growth and Regeneration, 2017-18

Professional activities and services

Editorial Board
- *Humanities and Social Sciences Communications (Springer Nature)*

Journal Peer Reviewer
- *Cities*
- *Land Use Policy*
- *Journal of Urban Planning and Development*
- *Cartography and Geographic Information Science*
- *Transaction in GIS*
- *Geo-spatial Information Science*
- *Big Data & Society*
- *Knowledge and Information Systems*
- *Urban Planning*

Conference Reviewer
- AAAI ICWSM

Professional Association

2022–	Member, Urban Health Cluster WG2, European Union
2022–	Cambridge Data Champion
2021–	Cambridge Centre for Data-Driven Discovery
2020–	Liaison in UK, Journal of Urban Planning International, China
2018–22	Member, The Association for Geographic Information, UK
2015–17	Member, ICOMOS-International Scientific Committee on Shared Built Heritage – Wuhan Research Centre, China