

## WHEN SOCIAL SCIENCE MEETS COMPUTER SCIENCE...

Webinar of Computational Social Science Laboratory (CSSL@CUHK)

## Spatial Data Mining to Understand Neighbor Problems and Neighborhood Change

21 November 2025 (Friday), 09:30 - 11:00 (UTC+8, HKT)

## **Abstract**

Large-scale administrative data collected by municipal governments are increasingly used by researchers to examine urban social phenomena and processes. This seminar will demonstrate how council data from Brisbane, Australia, were utilized to investigate the prevalence of neighbor problems through a GIS-based spatial approach. I will explore how the changing process of our cities such as gentrification and densification influence the prevalence of problems between neighbors, whether neighborhood characteristics affect the likelihood of neighbor problems and whether there are seasonal trends, particularly in noise-related complaints. Our findings reveal distinct spatial patterns of neighbor disputes, shaped by urban development and evolution. The sources of these issues often lie in a combination of neighborhood social dynamics and environmental factors. I will conclude by discussing the broader significance and potential of leveraging this type of naturally occurring administrative data to deepen our understanding of the social dynamics in urban environments.



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## **Biography**

Professor Yan Liu is an internationally recognised scholar in Urban Science and Spatial Data Science, specialising in GIS, urban analytics and modelling, and spatial social studies. Her research outcome has broad impact across coastal city development, urban and regional planning, social equality, and healthcare policies. She has been recognized as amongst the World's Top 2% Scientists by Stanford University.



