

RESEARCH INSIGHTS AND PERSPECTIVES OF URBAN DIGITAL TWINS

Speaker

Prof. Filip Biljecki

National University of Singapore



Abstract

The talk will present recent research efforts on urban and geospatial modelling at the NUS Urban Analytics Lab, in particular focusing on urban digital twins. The Lab spearheads a holistic and intertwined research agenda that covers the entire geospatial process in the urban sphere: from advancing means to acquire data and assess its quality to developing new use cases and unlocking value with AI & analytics. For example, the group has been working on understanding the usability of crowdsourced real estate data, developing a multi-scale prototype of a digital twin in the NUS campus aspiring to break silos among disparate domains and research groups, and working on foundational research such as defining and standardising the terminology in digital twins.

Biography

Filip Biljecki is an assistant professor at the National University of Singapore and the founder of the NUS Urban Analytics Lab. He holds a MSc and PhD degree from the Delft University of Technology in the Netherlands. Filip's research and teaching are converging Geomatic engineering, geospatial technologies, and urban data science to support digital twins and data-driven urban planning. He has published more than 160 peer-reviewed articles, which have been cited more than 9000 times. At NUS he has been awarded for teaching and research multiple times, and has supervised dozens of students leading them to publications in leading journals and placements at top universities and organisations. He holds associate editor roles in two prominent journals in urban studies: Computers, Environment and Urban Systems & Landscape and Urban Planning.



**25 August 2025
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10:00 am – 11:00 am



**Room 3574 (Lift 27/28)
Civil Engineering
Conference Room**

Enquiry:

Ms. Crystal LAU
cecystal@ust.hk