

PHD RESEARCHER

INTERESTS

3D and 2D Urban Analytics
Machine Learning
Geospatial Science
Complexity and Networks
Use Case Development

EDUCATION

PhD, Urban Analytics Lab (4.75/5.0)
National University of Singapore
Supervised by Prof. Filip Biljecki

2021 - 2025

Masters of Urban Planning (95th Perc.)
National University of Singapore

2017 - 2018

BSc Real Estate (Hons) w.
Specialisation in Urban Planning
National University of Singapore

2013 - 2017

REFEREES

CHAN Heng Chee
Professor (Former Chair)
Lee Kuan Yew Centre for
Innovative Cities
(PA) serena_lin@sutd.edu.sg

NEO Harvey
Senior Fellow
Lee Kuan Yew Centre for
Innovative Cities
harvey_neo@sutd.edu.sg

RESEARCH EXPERIENCE

Research Associate
Lee Kuan Yew Centre for
Innovative Cities

2018 - 2021

Lee Li Ming Programme in Ageing Urbanism
Innovative Planning and Design of Age-Friendly
Neighbourhoods in Singapore (NRF-MND)

Programme on Cities and Urban Science
Future of Asian Cities - Citizen Urban Science:
Policy and Practice (MOE)

Programme on Cities and Urban Science
Sociospatial Reconfiguration of the City in a
Post-Covid World (LKYCIC)

SELECTED PUBLICATIONS

Yap, W., Janssen, P., & Biljecki, F. (2022). Free and open source urbanism: software for urban planning practice. *Computers, Environment and Urban Systems*, 96, 101825. <https://doi.org/10.1016/j.compenvurbsys.2022.101825>

Yap, W., Chang, J. H., & Biljecki, F. (2022). Incorporating networks in semantic understanding of streetscapes: Contextualising active mobility decisions. *Environment and Planning B: Urban Analytics and City Science*, 23998083221138832.

Yap, W., Stouffs, R., & Biljecki, F. (Under review). Urbanity: Automated Modelling and Analysis of Multidimensional Networks in Cities. *npj Urban Sustainability*.

Chan, HC & **Yap, W.** (Forthcoming). Making public housing work: The Singapore case. Council of Urban Initiatives. UN-Habitat, UCL IIPP and LSE Cities.

SKILLS / RELEVANT COURSES

Analytical Skills

Deep Learning; Computer Vision; Complex Network Analysis; Geospatial Analytics; Statistics; Software Development; Dashboard Building; Data Science

Courses

Neural Networks and Deep Learning; Graph Machine Learning; Generative AI; Python OOP; C++; Web Development;

OVERSEAS EXPERIENCE

Asian Masters of Urbanism Programme
The University of Tokyo

2017

AWARDS / SCHOLARSHIPS

NUS PhD Research Scholarship
National University of Singapore

OTHER ACTIVITIES

Journal Review

International Journal of Geographical Information Science; Transportation Research Part D; Geoforum; Journal of Open Source Software; Sustainable Cities and Society