



Theme:

Innovations in openBIM and openGIS

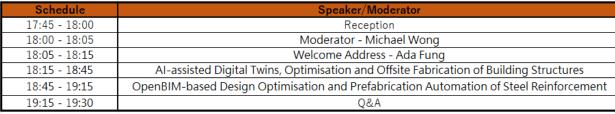
Class 49

Part 1

AI-assisted Digital Twins, Optimisation and Offsite Fabrication of Building Structures

<u> Part 2</u>

OpenBIM-based Design Optimisation and Prefabrication Automation of Steel Reinforcement



Speakers' Biography

Dr. Vincent Gan is an Assistant Professor from the Department of the Built Environment at the National University of Singapore. He is the Deputy Director of the Centre for Project and Facilities Management and Thrust Leader of the Centre for 5G Digital Building Technology. His research focuses on construction digitalisation using digital twins, robotics, computer vision, building information modelling (BIM), data-driven design and offsite fabrication. He received Bachelor's degrees in Construction Engineering (2011) and Architecture (2011), and his MSc (2012) and PhD (2016) in Civil Engineering at Hong Kong University of Science and Technology. Before joining NUS, he was a Research Assistant Professor at Hong Kong University of Science and Technology, Visiting Lecturer at Imperial College London (UK) and Visiting Academics at Purdue University (US). He has served as the PI/Co-PI for several research projects and industry consultation projects on BIM, AI, and digital twins for construction automation. Dr Gan has also authored over 65 peer-reviewed scholarly publications in SCI journals (incl. Automation in Construction, Advanced Engineering Informatics, Building and Environment) and international conferences. He has received several international awards and honours in recognition of his research, notable among these are the HKIE Structural Excellence Awards (merit), Grand Award for HK OpenBIM/OpenGIS, Best Paper Awards from renowned conferences (ICCBE12013, ICCEPM2017/2020, IPC2020), and Autodesk BIM Award 2017. Dr Gan is also an associate member of the American Society of Civil Engineers (ASCE). He serves as a reviewer for more than 20 SCI journals and an organising committee member for international conferences.

Mr.Mike Li is a PhD. researcher from the Department of Civil and Environmental Engineering at the Hong Kong University of Science and Technology. He received Bachelor's degree (2017) and his Mphi degree (2020) in South China University of Technology. His research interests include building information modeling (BIM), design for manufacturing and assembly (DfMA), Al in construction, data-driven design and off-site prefabrication. His research has been published in various international journals and conferences. He has received the Grand Award in the Hong Kong openBIM / openGIS Award 2022.

Note:

- 1. Participation at this training class is free of charge, but registration is required. The registration will close at 3pm on the day.
- 2. Upon the completion of this class, a 1 hour CPD will be offered at the cost of HK\$ 50 (as a handling charge).
- The class will be conducted in English.

