

CIB W116 – Smart and Sustainable Built Environments

Workshop series 1 : Human – Robot Collaboration for Sustainable Construction

Location: KW-P.1.49 **Time:** 1pm - 3pm, Tuesday 14th July 2026

Zoom: Join Zoom Meeting

<https://uws.zoom.us/j/5854121458?pwd=YnFxQTd3NjgrNERHbXY1c3RHY041dz09&omn=82245529155>

Meeting ID: 585 412 1458

Password: 981636

Host: Distinguished Professor Vivian Tam; Dr Linna GENG, Dr Mingxue Ma, Dr Yijun Zhou, Dr Lei Liu

Time	Runsheets
1pm – 1:10pm	Arrival and access
1:10pm – 1:15pm	Welcome address – Distinguished Prof Vivian Tam, Western Sydney University
1:15pm – 1:20pm	Opening remarks – CIB President, Prof Dongping Fang, Tsinghua University
1:20pm - 1:35pm	Semantic-based behaviour decision-making method for construction robots in worker-robot collaboration(Online) – Associate Prof Hongling Guo, Tsinghua University
1:35pm – 1:50pm	Trust in Human-Robot Collaboration for Sustainable Construction – Associate Prof Isabelle Y.S. Chan, The University of Hong Kong
1:50pm – 2:05pm	Human-Robot Collaborative Agentic AIoT for Sustainable Cross-Border Modular Construction Logistics – Assistant Prof Mike WU, Lingnan University
2:05pm – 2:45pm	Panel Discussion: <i>Integrating AI and Robotics for a Safer, Smarter, and Sustainable Built Environment</i> Facilitator: Dr Linna GENG Panellists: Associate Professor Isabelle Y.S. Chan; Assistant Professor Mike Wu
2:45pm – 2:55pm	Appreciation the speakers and gifts
2:55pm - 3:00pm	Event Conclusion & afternoon tea break

Speaker	Bio
 Associate Professor Hongling Guo	Dr. Hongling Guo is an Associate Professor, Head of the Department of Construction Management, and Deputy Director of Construction Safety Research Center at Tsinghua University, China. He graduated from Harbin Institute of Technology and The Hong Kong Polytechnic University, China, then worked as a researcher and visiting lecturer at The Hong Kong Polytechnic University for three years. In 2011, he started as an associate professor at Tsinghua University. His research areas include intelligent construction, virtual construction, digital construction safety management, and Building Information Modeling (BIM).
 Associate Dean (Teaching and Learning) Associate Professor	Isabelle serves as Associate Dean (Teaching and Learning) of the Faculty of Architecture, and Associate Professor at the Department of Real Estate and Construction, The University of Hong Kong. Her research interests cover health-centric built environment, health and safety, trust, and culture within the fragmented and rapidly digitising Architectural, Engineering, Construction, and Operations industry. In recent years, she has adopted cutting-edge, cross-disciplinary technologies such as electroencephalography (EEG) and virtual reality (VR) to address these issues. In line with these research interests, she has successfully secured a variety of external, competitive grants. The outcomes of these projects have been extensively disseminated via her more than 90 publications in books, international journals, conferences, consultancy reports, and so forth. Internationally, Isabelle is the Joint Coordinator of the Working Commission W112 – Culture in Construction at the International Council for Research & Innovation in Building & Construction (CIB), and Co-Chairman of the Associated Research Centres for the Urban Underground Space (ACUUS) – Youth Group. Isabelle has been honoured with the RICS (Royal Institute of Chartered Surveyor) Woman of the Built Environment Award.
 Assistant Professor Liupengfei (Mike) WU	Prof. Liupengfei Wu is now an Assistant Professor in the School of Data Science at Lingnan University, HK. Before joining Lingnan University, he was a Research Assistant Professor in the iLab at The University of Hong Kong (HKU) and the National Center of Technology Innovation for Digital Construction (Hong Kong Branch). He holds a BEng (First Class Honors) in Civil and Structural Engineering from The University of Adelaide (G8 University, 2016), an MSc (Distinction) in Digital Construction (2018), and a PhD in Digital Engineering (2023), both from HKU. Prof. Wu's research spans data science, digital engineering (BIM, VR/AR, IoT, Blockchain, Smart Contracts, NFT, Agentic AI, and Generative AI), project management, and public policy for digital transformation. His work has been published in leading journals, including Advanced Engineering Informatics, Project Management Journal, ASCE Journal of Construction Engineering and Management, ASCE Journal of Management in Engineering, Automation in Construction, and Computers in Industry.

