Professor Liupengfei Wu
Assistant Professor
School of Data Science
Lingnan University

Biography

Prof. Liupengfei Wu is now an Assistant Professor in the School of Data Science at Lingnan University, Hong Kong. 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 (such as fusing IoT sensor data with BIM for digital twin simulations, and using graph analytics to model stakeholder networks in large-scale projects), 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.

A recipient of multiple prestigious awards, Prof. Wu was recently honored with the Research and Knowledge Transfer Excellence Awards 2025 from Lingnan University and the Top Award 2025 from The Hong Kong Institute of Surveyors Outstanding Dissertation Awards. His distinguished accolades also include the Li Ka Shing Prize (2024), Best Theme Paper at iCCPMCE 2024, a Bronze Medal at the 48th International Exhibition of Inventions of Geneva (2023), the ASCE Best Peer-Reviewed Paper Award (2022), the Gold Award at the Hong Kong ICT Awards (2022), and being the Sole Winner in Professional Research at the buildingSMART International Awards (2021), among others. His innovations and scholarly contributions continue to advance the integration of emerging technologies in the built environment.

Prof. Wu's leadership is evidenced by his success in securing and managing a diverse and high-value research portfolio. His projects include a GRF-funded initiative on blockchain and zero-knowledge proofs for secure BIM access, multiple ITF grants such as the landmark "BIM Square" platform, and significant ITF-PSTS projects like "e-InStar 3.0" and "e-TranStar 2.0" for smart payments and transportation in Modular Integrated Construction (MiC). Furthermore, his applied research includes key consultation projects with the Hong Kong Housing Authority on Modular Integrated Construction and with the Architectural Services Department on a blockchain-based e-inspection system for public housing, among other projects, demonstrating a strong connection between his research and public sector application.