

Curriculum Vitae



Dr Liu Ziwen

Lecturer

School of Science and Technology

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Education Qualifications

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| 2021 | PhD (Engineering), Singapore University of Social Sciences, Singapore |
| 2013 | MSc (Building Performance and Sustainability), National University of Singapore, Singapore |
| 2010 | BEng (Building Services Engineering) with Second Class Honours (Upper Division), The University of Northumbria at Newcastle, UK |

Academic and Professional Experience

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| 2022 – Present | Lecturer, School of Science and Technology, Singapore University of Social Sciences |
| 2017 – 2022 | Senior Manager/Senior Building Information Modelling (BIM) Consultant, Digitalisation Department, Built Environment Research and Innovation Institute (BERII), Building and Construction Authority (BCA) |
| 2013 – 2017 | Executive Manager/Executive BIM Consultant, Centre for Construction IT (CCIT), BERII, BCA |
| 2011 – 2013 | BIM Specialist/BIM Consultant, CCIT, BCA |
| 2010 – 2011 | Executive Engineer, Meinhardt (S) Pte Ltd |

Accreditations and Memberships

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| 2016 – Present | Singapore Certified Energy Manager (SCEM) – 0758 |
| 2013 – Present | Green Mark Accredited Professional (GMAP) – 0522 |

International Refereed Journal Reviewer

- Applied Sciences
- Buildings
- Encyclopedia

Energies

Engineering, Construction and Architectural Management

Infrastructures

International Journal of Construction Management

Journal of Asian Architecture and Building Engineering

Journal of Information Technology in Construction (ITCon)

Sustainability

Research Interests

- BIM
- BIM submission and approval process
- Building performance simulation
- Computational BIM
- Construction engineering and management
- Integrated Digital Delivery (IDD)

Selected Publications

Peer Reviewed Journal Publications

Q Qiu, M Wang, J Guo, Z Liu, Q Wang* (2022). "An adaptive down-sampling method of laser scan data for scan-to-BIM", *Automation in Construction*, 135, 104135. doi: 10.1016/j.autcon.2022.104135

Z Liu, Y Lu, M Shen* and LC Peh (2021). "Transition from building information modelling (BIM) to integrated digital delivery (IDD) in sustainable building management: A knowledge discovery approach-based review", *Journal of Cleaner Production*. doi: 10.106/j.jclepro.2020.125223

Z Liu*, Y Lu, T Nath, Q Wang, LK Tiong, LC Peh (2021). "Critical success factors for BIM adoption during construction phase: a Singapore case study", *Engineering, Construction and Architectural Management*. doi:10.1108/ECAM-12-2020-1072

S Su*, Q Wang, L Han, J Hong and Z Liu (2020). "BIM- DLCA: An integrated dynamic environmental impacts assessment model for buildings", *Building and Environment*, 183, 107218. doi: 10.1016/j.buildenv.2020.107218

Z Liu*, Y Lu and LC Peh (2019). "A review and scientometric analysis of global Building Information Modelling (BIM) research in the Architecture, Engineering and Construction (AEC) industry", *Buildings*, 9(10), p. 210. doi: 10.3390/buildings9100210

Peer Reviewed Conference Publications

Z Liu*, K Chen, LC Peh and KW Tan (2017). "A feasibility study of Building Information Modelling for Green Mark New Non-Residential Building (NRB): 2015 analysis", *Energy Procedia*, 143, pp. 80–87. doi:

10.1016/j.egypro.2017.12.651.

Industry Publications

- Singapore BIM Guide
- Singapore BIM Essential Guide for Mechanical, Electrical and Plumbing (MEP) Consultants
- Singapore BIM Essential Guide for Transfer of BIM into Building Performance Analysis (BPA) Tools
- Codes of Practice for BIM e-Submission

Invited Conference and Seminar Presentations

- “Transition from Building Information Modelling (BIM) to Integrated Digital Delivery (IDD): IDD as an enabler for MEP modularisation process”, BCA – Specialists Trade Alliance of Singapore (STAS) Industry Sharing on Prefabricated MEP System, Singapore, Feb 2022
- “Transition from Building Information Modelling (BIM) to Integrated Digital Delivery (IDD): Singapore Construction Industry’s Digitalisation Journey”, The 4th Digital China Summit, Fujian, China, Apr 2021
- “Singapore BIM Journey”, China BIM Standardization Conference, Sichuan, China, Dec 2015
- “Mandatory BIM e-Submission: MEP requirement”, CAD to BIM seminar, held by Institution of Engineers Singapore (IES), Singapore 2014
- “Singapore BIM MEP e-Submission”, From CAD to BIM hands-on workshop, jointly held by Association of Consulting Engineers Singapore (ACES), BCA Academy and Autodesk, Singapore, Jan 2013

Awards

- Long Service Award (10 Years), BCA, Singapore July 2021
- Best Paper Award – First Award “A Review and Scientometric Analysis of Global Building Information Modeling (BIM) Research in the Architecture, Engineering and Construction (AEC) Industry” Basel, Switzerland, March 2021
- Special COVID-19 Recognition Award, Ministry of National Development (MND), Singapore, December 2020
- Long Service Award (5 Years), Building and Construction Authority, Singapore, July 2016

Updated on 09 May 2022