

## BIOGRAPHICAL SKETCH

**Jacob J. Lin**

Assistant Professor of Civil Engineering  
National Taiwan University

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### (a) Education & Training

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University of Illinois, Urbana-Champaign (uiuc)	
Ph.D. in Civil and Environmental Engineering	August 2020
M.S. in Computer Science	May 2018
National Taiwan University	
M.S. in Civil and Environmental Engineering	July 2013
B.S. in Civil and Environmental Engineering	July 2010

### (b) Research & Professional Experience

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Assistant Professor of Civil Engineering, National Taiwan University	2020 - present
Lead VDC+Lean Manager, Reconstruct	2015 - 2020
Research Assistant of CEE/CS, University of Illinois at Urbana-Champaign	2014 - 2020
Visiting Scholar of Construction Management, University of Washington	2012 – 2013
Research Assistant of Civil Engineering, National Taiwan University	2008– 2012

### (c) Publications

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#### Most closely related

- 1 Wang, T.H., Pal, A., **Lin, J.J.** and Hsieh, S.H., 2023. Construction Photo Localization in 3D Reality Models for Vision-Based Automated Daily Project Monitoring. *Journal of Computing in Civil Engineering*, 37(6), p.04023029.
- 2 Pal, A., **Lin, J.J.**, Hsieh, S.H. and Golparvar-Fard, 2023. Activity percent complete measurement of under-construction building elements through 3D informed semantic segmented orthographic view. *Automation in Construction*, (Accepted).
- 3 Pal, A., **Lin, J.J.**, Hsieh, S.H. and Golparvar-Fard, M., 2023. Automated vision-based construction progress monitoring in built environment through digital twin. *Developments in the Built Environment*, p.100247.
- 4 **Lin, J.J.** and Golparvar-Fard, M., 2021. Visual and Virtual Production Management System for Proactive Project Controls. *Journal of Construction Engineering and Management*, 147(7), p.04021058.
- 5 **Lin, J.J.**, Ibrahim, A., Sarwade, S. and Golparvar-Fard, M., 2021. Bridge Inspection with Aerial Robots: Automating the Entire Pipeline of Visual Data Capture, 3D Mapping, Defect Detection, Analysis, and Reporting. *Journal of Computing in Civil Engineering*, 35(2), p.04020064.

#### Other significant publications

- 6 Ham, Y., Han, K.K., **Lin, J.J.** and Golparvar-Fard, M., 2016. Visual monitoring of civil infrastructure systems via camera-equipped Unmanned Aerial Vehicles (UAVs): a review of related works. *Visualization in Engineering*, 4(1), pp.1-8.

- 7 **Lin, J.J.C.**, Hung, W.H. and Kang, S.C., 2015. Motion planning and coordination for mobile construction machinery. *Journal of Computing in Civil Engineering*, 29(6), p.04014082.
- 8 Lin, K.Y., Tsai, M.H., Gatti, U.C., **Lin, J.J.C.**, Lee, C.H. and Kang, S.C., 2014. A user-centered information and communication technology (ICT) tool to improve safety inspections. *Automation in construction*, 48, pp.53-63.
- 9 Wang, Y., Tang, P., Liu, K., Cai, J., Ren, R., Lin, J.J., Cai, H., Zhang, J., El-Gohary, N., Berges, M., Golparvar, M., 2023. Characterizing Data Sharing in Civil Infrastructure Engineering: Current Practice, Future Vision, Barriers, and Promotion Strategies. *Journal of Computing in Civil Engineering*.
- 10 Lin, J.J., Golparvar-Fard, M., 2020, Construction Progress Monitoring Using Cyber Physical System. *Cyber-Physical System in Construction*..
- 11 Tseng, P.Y., Lin, J.J., Chan, Y.C., Chen A.Y., 2022. Real-Time Indoor Localization with Visual SLAM for Emergency Response. *Automation in Construction*.
- 12 Duong, H. and Lin J.J., 2022, Reality Model-based Facility Management Framework for Existing Building. *Front. Built Environ.* 815672. doi: 10.3389/fbuil.2022.815672
- 13 Lin, J.J.C., Yang, C.E., Hung, W.H. and Kang, S.C., 2013. Accessibility evaluation system for site layout planning—a tractor trailer example. *Visualization in engineering*, 1(1), pp.1-11.

#### **(d) Synergistic Activities**

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Reviewer for journals including *ASCE JCEM JCCE*, *Elsevier Automation in Construction*, *Autonomous Robots*, *Computers & Industrial Engineering*

Related award:

- Teaching Excellence Award 2023 National Taiwan University
- Outstanding Reviewer 2022 ASCE Computing in Civil Engineering
- World Economic Forum - Future of Construction Ideas Competition, *World Economic Forum*
- 2016 CMAA Chicago Chapter Scholarship, Construction Management Association of America.
- 2016 William E. O'Neil Research Award, W.E. O'Neil Construction.
- Best Paper Award, 2015 ASCE International Workshop on Computing in Civil Engineering.

Official member of related international organization:

- International Consortium of Construction Engineering and Project Management (ICCEPM)
- Taiwan High-tech Facility Management Committee