李安叡 (An-Jui Li)

Profile

An-Jui Li received the Ph.D. degree from the Department of Civil, Environmental and Mining Engineering, The University of Western Australia. He is currently an Associate Professor in the Department of Civil and Construction Engineering, National Taiwan University of Science and Technology. His research interests include slope stability, AI application in geotechnical engineering and Geo-based Apps. Contact him at laj871@mail.ntust.edu.tw.

Tertiary Education

Bachelor (2002) National Taiwan University of Science and Technology Master (2004) National Taiwan University of Science and Technology PhD (2009) The University of Western Australia

Working Experiences

2004-2005 Engineer (Integrate System Inc.)

2005-2009 PhD student (The University of Western Auatralia)

2009-2010 Lecturer (Central Queensland University)

2010-2017 Lecturer (Deakin University)

2017-present Associate Professor (National Taiwan University of Science and Technology)

Journal Publications:

- 1. Wen HC, <u>Li AJ</u>, Lu CW, Chen CN (2022) "Application of the coupled Markov chain in soil liquefaction potential evaluation" Buildings, 12(12), 2095.
- Mburu JW, <u>Li AJ</u>, Lin HD, Lu CW (2022), "Investigations of unsaturated slopes subjected to rainfall infiltration using numerical approaches- A parametric study and comparative review" Sustainability, 14(21), 14465.
- 3. <u>Li AJ</u>, Wang WC, Lin HD (2022), "Investigation of slope reinforcement with drilled shafts in colluvium soils", Geomechanics and Engineering, 31(1), 71-86, [SCI].
- 4. Fatty A, <u>Li AJ</u>, Chen LS (2022), "Recurrent Neural Network Based IOS Mobile Applications for Slope Safety Assessment", IEEE Consumer Electronics Magazine, (Accepted), [SCI].
- 5. Shao KS, <u>Li AJ</u>, Chen CN, Chung CH, Lee CF, Kuo CP (2021), "Investigations of a weathered and closely jointed rock slope failure using back analyses" Sustainability, 13452.

- 6. <u>Li AJ</u>, Mburu JW, Chen CW, Yang KH (2022), "Investigations of silty soil slopes under unsaturated conditions based on strength reduction finite element and limit analysis" KSCE Journal of Civil Engineering, 26(3), 1095-1110, [SCI].
- Li AJ, Lim K, Hsiung BBC, Chen WC (2021), "Stability charts for fill slopes based on finite element limit analysis methods", Soil Mechanics and Foundation Engineering, (Accepted), [SCI].
- 8. Wang CC, Lin HD, <u>Li AJ</u>, Ting KE (2020), "Assessment of the unconfined compression strength of unsaturated lateritic soil using the UPV", Geomechanics and Engineering, 23(4), 339-349, [SCI].
- <u>Li AJ</u>, Jagne A, Lin HD, Huang FK (2020), "Investigation of Slurry Supported Trench Stability under Seismic Condition in Purely Cohesive Soils", Journal of GeoEngineering, (Accepted), [EI].
- 10. <u>Li AJ</u>, Fatty A., Yang I.-T. (2020), "Use of Evolutionary Computation to Improve Rock Slope Back Analysis", Applied Sciences, 10(6), [SCI].
- 11. Lin HD, Wang WC, <u>Li AJ</u> (2020), "Investigation of dilatancy angle effects on slope stability using the 3D finite element method strength reduction technique", COMPUTERS AND GEOTECHNICS, 118(103295), [SCI].
- 12. <u>Li AJ</u>, Lim K, Fatty A (2020), "Stability evaluations of three-layered soil slopes based on extreme learning neural network", JOURNAL OF THE CHINESE INSTITUTE OF ENGINEERS, 43(7): 628-637, [SCI].
- 13. Qian ZG, <u>Li AJ</u>, Chen WZ, Lyamin AV, Jiang, J-C (2018), "An artificial neural network approach to inhomogeneous soil slope stability predictions based on limit analysis methods" SOILS AND FOUNDATIONS, 59, 556-569 [SCI].
- 14. <u>Li AJ</u>, Qian ZG, Jiang, J-C, Lyamin, AV (2018), "Seismic slope stability evaluation considering rock mass disturbance varying in the slope" KSCE Journal of Civil Engineering, 23(3), 1043-1054 [SCI].
- Lim K, <u>Li AJ</u>, Schmid A*, Lyamin AV (2017), "Slope stability assessments using finite element limit analysis methods" International Journal of Geomechanics, 17(2), [SCI].
- Qian ZG, <u>Li AJ</u>, Lyamin AV, Wang CC, (2017), "Parametric studies of disturbed rock slope stability based on finite element limit analysis methods." Computers and Geotechnics, 81, 155-166 [SCI].
- 17. Lim K, Cassidy MJ, <u>Li AJ</u>, Lyamin AV (2017), "Mean Parametric Monte Carlo Study of Fill Slopes." International Journal of Geomechanics. 17(4) [SCI].
- 18. <u>Li AJ</u>, Khoo S, Lyamin AV, Wang Y, (2016), "Rock slope stability analyses using extreme learning neural network and terminal steepest descent algorithm." Automation in Construction, 65, 42-50. [SCI].

- 19. Lim K, Lyamin AV, Cassidy MJ, <u>Li AJ</u> (2016), "Three-dimensional slope stability charts for frictional fill materials placed on purely cohesive clay." International Journal of Geomechanics, 16(2). [SCI].
- 20. Lim K, <u>Li AJ</u>, Lyamin AV (2015), "Three-dimensional slope stability assessment of two-layered undrained clay." Computers and Geotechnics, 70, 1-17., [SCI].
- 21. Chen LH, Chen WC, Chen YC, Benyamin L, <u>Li AJ</u> (2015), "Investigation of hydraulic fracture propagation using a post-peak control system coupled with acoustic emission." Rock Mechanics and Rock Engineering, 48(3), 1233-1248., [SCI].
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- 23. <u>Li AJ</u>, Merifield RS, Lin HD, Lyamin AV (2014), "Trench stability under bentonite pressure in purely cohesive clay." International Journal of Geomechanics, 14(1), 151-157., [SCI].
- 24. Wang Y, Khoo S, <u>Li AJ</u>, Hao H (2013), "FEM calibrated ARMAX model updating method for time domain damange identification." Advances in Structural Engineering, 16(1), 51-60., [SCI].
- Lee J-D, Lin J-F, <u>Li AJ</u> (2013), "Estimator-based Sliding Mode Control Strategy Design." Australian Journal of Electrical & Electronics Engineering, 10(1), 97-106...
- Li AJ, Cassidy, MJ, Wang Y, Merifield RS, Lyamin AV (2012), "Parametric Monte Carlo studies of rock slopes based on the Hoek-Brown failure criterion." Computers and Geotechnics 45, 11-18, [SCI].
- 27. <u>Li AJ</u>, RS Merifield, AV Lyamin (2011), "Effect of rock mass disturbance on the stability of rock slopes using the Hoek–Brown failure criterion." Computers and Geotechnics 38 (4), 546-558, [SCI].
- Li AJ, RS Merifield, AV Lyamin (2010), "Three-dimensional stability charts for slopes based on limit analysis methods." Canadian Geotechnical Journal 47 (12), 1316-1334, [SCI].
- Li AJ, RS Merifield, AV Lyamin (2009), "Limit analysis solutions for three dimensional undrained slopes." Computers and Geotechnics 36 (8), 1330-1351, [SCI].
- 30. <u>Li AJ</u>, AV Lyamin, RS Merifield (2009), Seismic rock slope stability charts based on limit analysis methods." Computers and Geotechnics 36 (1), 135-148, [SCI].
- 31. <u>Li AJ</u>, RS Merifield, AV Lyamin (2008), "Stability charts for rock slopes based on the Hoek–Brown failure criterion." International Journal of Rock Mechanics and Mining Sciences 45 (5), 689-700, [SCI]

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- 2. <u>Li AJ</u>, Lim K, Hsiung BBC, Chen WC (2021), "Stability charts for fill slopes based on finite element limit analysis methods", Soil Mechanics and Foundation Engineering, (Accepted), [SCI].
- 3. Wen HC, <u>Li AJ</u>, Lu CW, Chen CN (2022) "Application of the coupled Markov chain in soil liquefaction potential evaluation" Building Structures, (Accepted).
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