

卿建業 教授 Jianye Ching

Professor

學歷/ 美國加州大學柏克萊分校博士

Ph.D. in Civil Engineering, U. C. Berkeley (UCB)

專長/ 大地工程中不確定性量化分析














期刊論文 (Journal Paper)

☒corresponding author

1. Ching, J. ☒, Yang, Z.Y., Shiau, J.Q., and Chen, C.J. (2013). Estimation of rock pressure during an excavation/cut in sedimentary rocks with inclined bedding planes, *Structural Safety*, 41, 11-19. (SCI)
2. Ching, J. ☒ and Phoon, K.K. (2013). Mobilized shear strength of spatially variable soils under simple stress states, *Structural Safety*, 41, 20-28. (SCI)
3. Jha, S.K. and Ching, J. ☒ (2013). Simulating spatial averages of stationary random field using Fourier series method, *ASCE Journal of Engineering Mechanics*, 139(5), 594-605. (SCI)
4. Juang, C.H. ☒, Ching, J., and Luo, Z. (2013). Assessing SPT-based probabilistic models for liquefaction potential evaluation: a ten-year update, *Georisk*, 7(3), 137-150. (ESCI)
5. Wu, S.H., Ching, J. ☒, and Ou, C.Y. (2013). Predicting wall displacements for excavations with cross walls in soft clay, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 139(6), 914-927. (SCI)
6. Ching, J. ☒ and Phoon, K.K. (2013). Quantile value method versus design value method for calibration of reliability-based geotechnical codes, *Structural Safety*, 44, 47-58. (SCI)
7. Ching, J. ☒ and Liao, H.-J. (2013). Re-analysis of Freeway-3 dip slope failure case – a spatial variability view, *Journal of GeoEngineering*, 8(1), 1-10. (EI)
8. Ching, J. ☒, Phoon, K.K., Chen, J.R., and Park, J.H. (2013). Robustness of constant LRFD factors for drilled shafts in multiple strata, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 139(7), 1104-1114. (SCI)
9. Ching, J. ☒ and Phoon, K.K. (2013). Effect of element sizes in random field finite element simulations of soil shear strength, *Computers and Structures*, 126, 120-134. (SCI)
10. Phoon, K.K. ☒, Ching, J., and Chen, J.R. (2013). Performance of reliability-based design code formats for foundations in layered soils, *Computers and Structures*, 126, 100-106. (SCI)
11. Ching, J. ☒ and Phoon, K.K. (2013). Probability distribution for mobilized shear strengths of spatially variable soils under uniform stress states, *Georisk*, 7(3), 209-224. (ESCI)

12. Ching, J. and Phoon, K.K. (2013). Multivariate distribution for undrained shear strengths under various test procedures, *Canadian Geotechnical Journal*, 50(9), 907-923. (SCI)
13. Jha, S.K. and Ching, J. (2013). Simplified method for reliability analysis and reliability-based design of spatially variable undrained slopes, *Soils and Foundations*, 53(5), 708-719. (SCI)
14. Juang, C.H., Ching, J., Wang, L., Khoshnevisan, S., and Ku, C.S. (2013). Simplified procedure for estimation of liquefaction-induced settlement and site-specific probabilistic settlement hazard curve using CPT, *Canadian Geotechnical Journal*, 50, 1055-1066. (SCI)
15. Tabarrok, M., Ahmad, F., Banaki, R., Jha, S.K., and Ching, J. (2013). Determining safety factors of spatially variable slopes modeled by random fields, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 139(12), 2082-2095. (SCI)
16. Ching, J., Phoon, K.K., and Chen, C.H. (2014). Modeling CPTU parameters of clays as a multivariate normal distribution, *Canadian Geotechnical Journal*, 51(1), 77-91. (SCI)
17. Hu, Y.G. and Ching, J. (2014). The critical scale of fluctuation for active lateral forces, *Computers and Geotechnics*, 57, 24-29. (SCI)
18. Ching, J., Phoon, K.K., and Kao, P.H. (2014). Mean and variance of the mobilized shear strengths for spatially variable soils under uniform stress states, *ASCE Journal of Engineering Mechanics*, 140(3), 487-501. (SCI)
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20. Ching, J. and Phoon, K.K. (2014). Reply to the discussion by Mesri on "Multivariate distribution for undrained shear strengths under various test procedures", *Canadian Geotechnical Journal*, 51(3), 348-351. (SCI)
21. Ching, J., Phoon, K.K., and Yu, J.W. (2014). Linking site investigation efforts to final design savings with simplified reliability-based design methods, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 140(3), 04013032. (SCI)
22. Ching, J. and Lin, C.J. (2014). Probability distribution for mobilized shear strengths of saturated undrained clays modeled by 2-D stationary Gaussian random field - A 1-D stochastic process view, *Journal of Mechanics*, 30, 229-239. (SCI)
23. Ching, J. and Phoon, K.K. (2014). Transformations and correlations among some clay parameters – the global database, *Canadian Geotechnical Journal*, 51(6), 663-685. (SCI)
24. Ching, J. and Phoon, K.K. (2014). Correlations among some clay parameters – the multivariate distribution, *Canadian Geotechnical Journal*, 51(6), 686-704. (SCI)
25. Wu, S.H., Ching, J., and Ou, C.Y. (2014). Probabilistic observational method for predicting wall displacements in excavations, *Canadian Geotechnical Journal*, 51, 1111-1122. (SCI)
26. Ching, J. and Yang, J.J. (2014). Simplified reliability-based design for axial capacity of footings in cohesionless soils – application of the quantile value method, *Journal of GeoEngineering*, 9(3), 95-102. (EI)

27. Wu, S.H., Ou, C.Y., [Ching, J.](#) (2014), Calibration of model uncertainties for basal heave stability of wide excavations in clay, *Soils and Foundations*, 54, 1159-1174. (SCI)
28. Hu, Y.G. and [Ching, J.](#) (2015). Impact of spatial variability in soil shear strength on active lateral forces, *Structural Safety*, 52, 121-131. (SCI)
29. [Ching, J.](#) and Phoon, K.K. (2015). Reducing the transformation uncertainty for the mobilized undrained shear strength of clays, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 141(2), 04014103. (SCI)
30. Wu, S.H., [Ching, J.](#), and Ou, C.Y. (2015). Simplified reliability-based design of wall displacements for excavations in soft clay considering cross walls, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 141(3), 06014017. (SCI)
31. [Ching, J.](#), Phoon, K.K., and Yang, J.J. (2015). Role of redundancy in simplified geotechnical reliability-based design - a quantile value method perspective, *Structural Safety*, 55, 37-48. (SCI)
32. Hu, Y.G. and [Ching, J.](#) (2015). A new procedure for simulating active lateral force in spatially variable clay modeled by anisotropic random field, *Journal of Mechanics*, 31(4), 381-390. (SCI)
33. [Ching, J.](#), Wang, J.S., Juang, C.H., and Ku, C.S. (2015). CPT-based stratigraphic profiling using the wavelet transform modulus maxima, *Canadian Geotechnical Journal*, 52(12), 1993-2007. (SCI)
34. [Ching, J.](#) and Wang, J.S. (2016). Application of the transitional Markov chain Monte Carlo to probabilistic site characterization, *Engineering Geology*, 203, 151-167. (SCI)
35. [Ching, J.](#), Wu, S.H., and Phoon, K.K. (2016). Statistical characterization of random field parameters using frequentist and Bayesian approaches, *Canadian Geotechnical Journal*, 53(2), 285-298. (SCI)
36. [Ching, J.](#), Hu, Y.G., and Phoon, K.K. (2016). On characterizing spatially variable soil shear strength using spatial average, *Probabilistic Engineering Mechanics*, 45, 31-43. (SCI)
37. [Ching, J.](#), Tong, X.W., and Hu, Y.G. (2016). Effective Young's modulus for a spatially variable elementary soil mass subjected to a simple stress state, *Georisk*, 10(1), 11-26. (ESCI)
38. [Ching, J.](#), Lee, S.W., and Phoon, K.K. (2016). Undrained strength for a 3D spatially variable clay column subjected to compression or shear, *Probabilistic Engineering Mechanics*, 45, 127-139. (SCI)
39. [Ching, J.](#) and S.P. Sung (2016). Simulating a curve average in a stationary normal random field using Fourier series method, *Journal of GeoEngineering*, 11(1), 33-43. (EI)
40. Gong, W., Juang, C.H., Martin, J.R., and [Ching, J.](#) (2016). New sampling method and procedures for estimating failure probability, *ASCE Journal of Engineering Mechanics*, 142(4), 04015107. (SCI)
41. [Ching, J.](#), Phoon, K.K., and Wu, S.H. (2016). Impact of statistical uncertainty on geotechnical reliability estimation, *ASCE Journal of Engineering Mechanics*, 142(6), 04016027. (SCI)

42. Phoon, K.K. , Retief, J.V., Ching, J., Dithinde, M., Schweckendiek, T., Wang, Y., and Zhang, L. (2016). Some observations on ISO2394:2015 Annex D (Reliability of Geotechnical Structures), *Structural Safety*, 62, 24-33. (SCI)
43. Ching, J. , Phoon, K.K., and Li, D.Q. (2016). Robust estimation of correlation coefficients among soil parameters under the multivariate normal framework, *Structural Safety*, 63, 21-32. (SCI)
44. Ching, J. , and Hu, Y.G. (2016). Effect of element size in random field finite element simulation on effective Young's modulus, *Mathematical Problems in Engineering*, Volume 2016, Article ID 8756271. (SCI)
45. Chen, J.C. , Yang, J., and Ching, J. (2016). Estimating peak flow-discharge during extreme rainfall events for the Gao-Ping river, Taiwan. *International Journal of Safety and Security Engineering*, 6(3), 663-673. (EI)
46. Ching, J. , Wu, T.J., and Phoon, K.K. (2016). Spatial correlation for transformation uncertainty and its applications, *Georisk*, 10(4), 294-311. (ESCI)
47. Ching, J. , Phoon, K.K., and Pan, Y.K. (2017). On characterizing spatially variable soil Young's modulus using spatial average, *Structural Safety*, 66, 106-117. (SCI)
48. Ching, J. , Lin, G.H., Chen, J.R., and Phoon, K.K. (2017). Transformation models for effective friction angle and relative density calibrated based on a multivariate database of coarse-grained soils, *Canadian Geotechnical Journal*, 54(4), 481-501. (SCI)
49. Ching, J. , and Phoon, K.K. (2017). Characterizing uncertain site-specific trend function by sparse Bayesian learning, *ASCE Journal of Engineering Mechanics*, 143(7), 04017028. (SCI)
50. Ching, J. , Phoon, K.K., and Sung, S.P. (2017). Worst case scale of fluctuation in basal heave analysis involving spatially variable clays, *Structural Safety*, 68, 28-42. (SCI)
51. Ching, J. , and Wang, J.S. (2017). Discussion: Transitional Markov Chain Monte Carlo: Observations and Improvements, *ASCE Journal of Engineering Mechanics*, 143(9), 07017001. (SCI)
52. Ching, J. , Phoon, K.K., Beck, J.L., and Huang, Y. (2017). Identifiability of geotechnical site-specific trend functions, *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering*, 3(4), 04017021. (ESCI)
53. Ching, J. , and Wu, T.J. (2017). Probabilistic transformation model for preconsolidation stress based on clay index properties, *Engineering Geology*, 226, 33-43. (SCI)
54. Ching, J. , Lin, G.H., Phoon, K.K., and Chen, J.R. (2017). Correlations among some parameters of coarse-grained soils – the multivariate probability distribution model, *Canadian Geotechnical Journal*, 54(9), 1203-1220. (SCI)

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1. Phoon, K.K. and Ching, J. (2013). Is site investigation an investment or expense – a reliability perspective. 18 SEAGC. (**S. L. Lee Lecture paper**)
2. Ching, J. (2013). Preliminary study for the effective random dimension in geotechnical reliability. 18 SEAGC.
3. Phoon, K.K. and Ching, J. (2013). Construction of virtual sites for reliability-based design. 18 ICSMGE.
4. Ching, J. and Phoon, K.K. (2013). Construction of multivariate distribution of soil properties. 15th National Conference in Geotechnical Engineering, Taiwan.
5. Ching, J. and Phoon, K.K. (2013). Cost-effective framework for simplified geotechnical reliability-based design. ISGSR 2013.
6. Ching, J. and Phoon, K.K. (2014). Quantile value method for geotechnical reliability code calibration. ICVRAM 2014.
7. Phoon, K.K. and Ching, J. (2014). Univariate to multivariate characterization of geotechnical variability. ISRERM 2014. (**keynote paper**)
8. Phoon, K.K. and Ching, J. (2014). Characterization of geotechnical variability – a multivariate perspective. IACMAG 2014. (**plenary speech paper**)
9. Phoon, K.K. and Ching, J. (2015). Is there anything better than LRFD for simplified geotechnical RBD? ISGSR 2015. (**Wilson Tang Lecture**)
10. Ching, J., Wu, S.H., and Phoon, K.K. (2015). Quantifying statistical uncertainty in site investigation. ISGSR 2015.
11. Hu, Y.G., Ching, J., and Phoon, K.K. (2015). Can the effect of shear strength spatial variability be summarized as the pure spatial average? 15 ARC.
12. Ching, J., Hu, Y.G., and Phoon, K.K. (2015). On the use of spatially averaged shear strength for the bearing capacity of a shallow foundation. ICASP 12.
13. Ching, J. and Pan, Y.K. (2015). First two moments of effective Young's modulus for a three-dimensional spatially variable soil mass, 2015 SRES.
14. Ching, J., Wang, J.S., and Phoon, K.K. (2016). Consistency of maximum likelihood estimates for random field parameters. APSSRA 2016.
15. Ching, J., Pan, Y.K., and Phoon, K.K. (2016). A unified spatial averaging model for effective Young's modulus of a three-dimensional spatially variable elementary soil mass. APSSRA 2016.
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17. Ching, J. and Phoon, K.K. (2017). Characterizing unknown trend using sparse Bayesian learning. Geo-Risk 2017/6th ISGSR.
18. Ching, J., Hu, Y.G., and Tabarrokhi, M. (2017). Mobilization of spatially variable shear strength. ICOSSAR 2017.

19. Ching, J. (2017). Construction of site-specific probabilistic transformation model for geotechnical design. Int. Symp. on Life-cycle Engineering and Sustainability Infrastructure. (**keynote**)
20. Phoon, K.K. and Ching, J. (2017). Homogenization of shear strength and modulus in spatially variable soils. IACMAG 2017. (**invited lecture**)
21. Phoon, K.K. and Ching, J. (2017). Better correlations for geotechnical design. GeoSS 10th Anniversary Conference. (**State-of-the-Practice Lecture**)

專書及專書論文

1. Ching, J. [✉], Phoon, K.K., and Lee, W.T. (2013). Second-moment characterization of undrained shear strengths from different test procedures, Foundation Engineering in the Face of Uncertainty, Geotechnical Special Publication honoring Professor F. H. Kulhawy, 308-320. (EI)
2. Phoon, K.K. [✉] and Ching, J. (2013). Multivariate model for soil parameters based on Johnson distributions, Foundation Engineering in the Face of Uncertainty, Geotechnical Special Publication honoring Professor F. H. Kulhawy, 337-353 (EI).
3. Phoon, K.K. [✉] and Ching, J. (2013). Can we do better than the constant partial factor design format? Modern Geotechnical Design Codes of Practice – Implementation, Application, and Development, IOS Press, 295-310.
4. Phoon, K.K. and Ching, J. (2015). Risk and Reliability in Geotechnical Engineering. Taylor & Francis.
5. Ching, J. and K.K. Phoon (2015). Constructing multivariate distributions for soil parameters. Chap. 1 in Risk and Reliability in Geotechnical Engineering (Eds.: K.K. Phoon and J. Ching). Taylor & Francis.
6. Hu, Y.G., Ching, J. [✉], and K.K. Phoon (2016). Can a spatially variable field be converted into a homogeneous spatial average over an influence zone? GSP in memory of the late Professor Wilson H. Tang.
7. Phoon, K.K., Prakoso, W.A., Wang, Y., and Ching, J. (2016). Uncertainty representation of geotechnical design parameters. Chap 3 in Reliability of Geotechnical Structures in ISO2394, Eds. KK Phoon & JV Retief, CRC Press/Balkema.
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