

LIST OF REFERENCES OF GEORISK

2012-2020 (ISSUE 1)

UNCERTAINTY IDENTIFICATION AND QUANTIFICATION

Site investigation

- [1] Hicks, M. A., Varkey, D., van den Eijnden, A. P., de Gast, T., and Vardon, P. J. (2019). On characteristic values and the reliability-based assessment of dykes. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 313-319.
- [2] Abdulla, M. B., Sousa, R. L., Einstein, H., and Awadalla, S. (2019). Optimised multivariate Gaussians for probabilistic subsurface characterisation. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 303-312.
- [3] Bilgin, Ö., Arens, K., and Dettloff, A. (2019). Assessment of variability in soil properties from various field and laboratory tests. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 247-254.
- [4] Feng, S., and Vardanega, P. J. (2019). A database of saturated hydraulic conductivity of fine-grained soils: probability density functions. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 255-261.
- [5] Knuuti, M., and Lämsivaara, T. (2019). Variation of CPTu-based transformation models for undrained shear strength of Finnish clays. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 262-270.
- [6] Uzielli, M., and Mayne, P. W. (2019). Probabilistic assignment of effective friction angles of sands and silty sands from CPT using quantile regression. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 271-275.
- [7] Crisp, M. P., Jaksa, M. B., Kuo, Y. L., Fenton, G. A., and Griffiths, D. V. (2019). A method for generating virtual soil profiles with complex, multi-layer stratigraphy. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(2), 154-163.
- [8] Yang, W., Xu, Y., and Wang, J. P. (2017). Characterising soil property in an area with limited measurement: a Bayesian approach. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 189-196.
- [9] Aladejare, A. E., and Wang, Y. (2017). Evaluation of rock property variability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 22-41.
- [10] Papaioannou, I., and Straub, D. (2017). Learning soil parameters and updating geotechnical reliability estimates under spatial variability—theory and application to shallow foundations. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 116-128.
- [11] Sousa, R., Karam, K. S., Costa, A. L., and Einstein, H. H. (2017). Exploration and decision-making in geotechnical engineering—a case study. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 129-145.
- [12] Wang, Y., Akeju, O. V., and Cao, Z. (2016). Bayesian Equivalent Sample Toolkit (BEST): an Excel VBA program for probabilistic characterisation of geotechnical properties from limited observation data. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 251-268.
- [13] Ching, J., Phoon, K. K., and Wu, T. J. (2016). Spatial correlation for transformation

- uncertainty and its applications. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 294-311.
- [14] Nastev, M., Parent, M., Benoit, N., Ross, M., and Howlett, D. (2016). Regional VS30 model for the St. Lawrence Lowlands, Eastern Canada. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(3), 200-212.
- [15] Depina, I., Le, T. M. H., Eiksund, G., and Strøm, P. (2016). Cone penetration data classification with Bayesian Mixture Analysis. *Georisk: Assessment and management of risk for engineered systems and geohazards*, 10(1), 27-41.
- [16] Huber, M., Marconi, F., and Moscatelli, M. (2015). Risk-based characterisation of an urban building site. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(1), 49-56.
- [17] Medina-Cetina, Z., and Esmailzadeh, S. (2014). Joint states of information from different probabilistic geo-profile reconstruction methods. *Georisk: assessment and management of risk for engineered systems and geohazards*, 8(3), 171-191.
- [18] Kim, H. S., Kim, H. K., Shin, S. Y., and Chung, C. K. (2012). Application of statistical geo-spatial information technology to soil stratification in the Seoul metropolitan area. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(4), 221-228.

Spatial Variability

- [19] Fenton, G. A., Naghibi, F., and Hicks, M. A. (2018). Effect of sampling plan and trend removal on residual uncertainty. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(4), 253-264.
- [20] Jamshidi Chenari, R., Kamyab Farahbakhsh, H., Heidarie Golafzani, S., and Eslami, A. (2018). Non-stationary realisation of CPT data: considering lithological and inherent heterogeneity. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(4), 265-278.
- [21] Foulon, T., Saeidi, A., Chesnaux, R., Nastev, M., and Rouleau, A. (2018). Spatial distribution of soil shear-wave velocity and the fundamental period of vibration—a case study of the Saguenay region, Canada. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), 74-86.
- [22] Allahverdizadeh, P., Griffiths, D. V., and Fenton, G. A. (2016). Influence of soil shear strength spatial variability on the compressive strength of a block. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(1), 2-10.
- [23] Ching, J., Tong, X. W., and Hu, Y. G. (2016). Effective Young's modulus for a spatially variable soil mass subjected to a simple stress state. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(1), 11-26.
- [24] Namysłowska-Wilczyńska, B. (2015). Application of turning bands technique to simulate values of copper ore deposit parameters in Rudna mine (Lubin-Sieroszowice region in SW part of Poland). *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(4), 224-241.
- [25] Jamshidi Chenari, R., and Kamyab Farahbakhsh, H. (2015). Generating non-stationary random fields of auto-correlated, normally distributed CPT profile by matrix decomposition method. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(2), 96-108.
- [26] Lloret-Cabot, M., Fenton, G. A., and Hicks, M. A. (2014). On the estimation of scale of fluctuation in geostatistics. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(2), 129-140.
- [27] Ching, J., and Phoon, K. K. (2013). Probability distribution for mobilised shear

strengths of spatially variable soils under uniform stress states. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(3), 209-224.

Model Uncertainty

- [28] Chahbaz, R., Sadek, S., and Najjar, S. (2019). Uncertainty quantification of the bond stress–displacement relationship of shoring anchors in different geologic units. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 276-283.
- [29] Phoon, K. K., and Tang, C. (2019). Effect of extrapolation on interpreted capacity and model statistics of steel H-piles. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 291-302.
- [30] Zhang, L. (2019). Spotlight article “characterization of geotechnical model uncertainty”.
- [31] Phoon, K. K., and Tang, C. (2019). Characterisation of geotechnical model uncertainty. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(2), 101-130.

Monitoring, Inspection and Back analysis

- [32] Huang, J., Zeng, C., and Kelly, R. (2019). Back analysis of settlement of Teven Road trial embankment using Bayesian updating. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 320-325.
- [33] Zhang, L., Wu, F., Zheng, Y., Chen, L., Zhang, J., and Li, X. (2018). Probabilistic calibration of a coupled hydro-mechanical slope stability model with integration of multiple observations. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 169-182.
- [34] Liu, H., Tang, L., and Lin, P. (2018). Estimation of ultimate bond strength for soil nails in clayey soils using maximum likelihood method. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 190-202.
- [35] Ering, P., and Sivakumar Babu, G. L. (2017). A Bayesian framework for updating model parameters while considering spatial variability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(4), 285-298.
- [36] Nishimura, S. I., Shibata, T., and Shuku, T. (2016). Diagnosis of earth-fill dams by synthesised approach of sounding and surface wave method. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 312-319.
- [37] Vardon, P. J., Liu, K., and Hicks, M. A. (2016). Reduction of slope stability uncertainty based on hydraulic measurement via inverse analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(3), 223-240.
- [38] Schweckendiek, T., and Vrouwenvelder, A. C. W. M. (2013). Reliability updating and decision analysis for head monitoring of levees. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(2), 110-121.

GEOTECHNICAL SAFETY AND RELIABILITY ANALYSIS

General

- [1] Zhang, L. (2020). Spotlight article “The story of statistics in geotechnical engineering”. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 14(1), 1-2.
- [2] Phoon, K. K. (2020). The story of statistics in geotechnical engineering. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*,

14(1), 3-25.

- [3] Phoon, K. K., and Juang, C. H. (2019). Georisk special issue in Honour and Memory of Professor Tien H. Wu. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 237-241.
- [4] Baecher, G. B., and Christian, J. T. (2019). TH Wu and the origins of geotechnical reliability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 242-246.

Slope, Dam, Embankment, and Levee

- [1] Dassanayake, S. M., & Mousa, A. (2020). Probabilistic stability evaluation for wildlife-damaged earth dams: a Bayesian approach. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 14(1), 41-55.
- [2] Low, B. K. (2019). Probabilistic insights on a soil slope in San Francisco and a rock slope in Hong Kong. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 326-332.
- [3] Mostofi, A., Gilbert, R. B., Montgomery, D. R., and Wartman, J. (2019). Assessing recurrence probability for Oso 2014 landslide in order to manage risk. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 333-340.
- [4] Zhu, H., and Zhang, L. (2019). Root-soil-water hydrological interaction and its impact on slope stability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 349-359.
- [5] Gao, X., Liu, H., Zhang, W., Wang, W., and Wang, Z. (2019). Influences of reservoir water level drawdown on slope stability and reliability analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(2), 145-153.
- [6] Chivatá Cárdenas, I. (2019). On the use of Bayesian networks as a meta-modelling approach to analyse uncertainties in slope stability analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(1), 53-65.
- [7] Hariri-Ardebili, M. A., and Boodagh, P. (2019). Taguchi design-based seismic reliability analysis of geostuctures. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(1), 34-52.
- [8] Yuan, J., Papaioannou, I., and Straub, D. (2019). Probabilistic failure analysis of infinite slopes under random rainfall processes and spatially variable soil. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(1), 20-33.
- [9] Lendering, K., Schweckendiek, T., and Kok, M. (2018). Quantifying the failure probability of a canal levee. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 203-217.
- [10] Luo, N., and Bathurst, R. J. (2018). Probabilistic analysis of reinforced slopes using RFEM and considering spatial variability of frictional soil properties due to compaction. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(2), 87-108.
- [11] Cordier, M., and Léger, P. (2018). Structural stability of gravity dams: a progressive assessment considering uncertainties in shear strength parameters. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(2), 109-122.
- [12] Javankhoshdel, S., Luo, N., and Bathurst, R. J. (2017). Probabilistic analysis of simple slopes with cohesive soil strength using RLEM and RFEM. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(3), 231-246.

- [13]Tang, D., Li, D. Q., and Cao, Z. J. (2017). Slope stability analysis in the Three Gorges Reservoir Area considering effect of antecedent rainfall. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 161-172.
- [14]Huang, W. C., and Yu, H. W. (2016). Variability of levee failure mechanisms subject to heavy rainfalls, case studies in Taiwan. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 269-279.
- [15]Kasama, K., and Whittle, A. J. (2016). Effect of spatial variability on the slope stability using Random Field Numerical Limit Analyses. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(1), 42-54.
- [16]Li, J. H., Cassidy, M. J., Tian, Y., Huang, J., Lyamin, A. V., and Uzielli, M. (2016). Buried footings in random soils: comparison of limit analysis and finite element analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(1), 55-65.
- [17]Montoya-Noguera, S., and Lopez-Caballero, F. (2016). Numerical modeling of discrete spatial heterogeneity in seismic risk analysis: application to treated ground soil foundation. *GeoRisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(1), 66-82.
- [18]Rodríguez-Ochoa, R., Nadim, F., Cepeda, J. M., Hicks, M. A., and Liu, Z. (2015). Hazard analysis of seismic submarine slope instability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 128-147.
- Rodríguez-Ochoa, R., Nadim, F., Cepeda, J. M., Hicks, M. A., and Liu, Z. (2015). Hazard analysis of seismic submarine slope instability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 128-147.
- [19]Umrao, R. K., Singh, R., and Singh, T. N. (2015). Stability evaluation of hill cut slopes along national highway-13 near Hospet, Karnataka, India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 158-170.
- [20]Jamshidi Chenari, R., and Alaie, R. (2015). Effects of anisotropy in correlation structure on the stability of an undrained clay slope. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(2), 109-123.
- [21]Le, T. M. H. (2014). Reliability of heterogeneous slopes with cross-correlated shear strength parameters. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(4), 250-257.
- [22]Pareek, N., Pal, S., Kaynia, A. M., and Sharma, M. L. (2014). Empirical-based seismically induced slope displacements in a geographic information system environment: a case study. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(4), 258-268.
- [23]Spross, J., Johansson, F., and Larsson, S. (2014). On the use of pore pressure measurements in safety reassessments of concrete dams founded on rock. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(2), 117-128.
- [24]Samui, P., Hariharan, R., and Karthikeyan, J. (2014). Determination of stability of slope using Minimax Probability Machine. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(2), 147-151.
- [25]Heyer, T., and Stamm, J. (2013). Levee reliability analysis using logistic regression models—abilities, limitations and practical considerations. *Georisk: assessment and management of risk for engineered systems and geohazards*, 7(2), 77-87.
- [26]Kanning, W., and Calle, E. O. F. (2013). Derivation of a representative piping resistance parameter based on random field modelling of erosion paths. *Georisk:*

Assessment and Management of Risk for Engineered Systems and Geohazards, 7(2), 99-109.

- [27] Bachmann, D., Huber, N. P., Johann, G., and Schüttrumpf, H. (2013). Fragility curves in operational dike reliability assessment. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(1), 49-60.
- [28] Hata, Y., Ichii, K., and Tokida, K. I. (2012). A probabilistic evaluation of the size of earthquake induced slope failure for an embankment. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(2), 73-88.
- [29] Santos, R. N. C. D., Caldeira, L. M. M. S., and Serra, J. P. B. (2012). FMEA of a tailings dam. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(2), 89-104.

Foundation

- [30] Rezaie Soufi, G., Jamshidi Chenari, R., & Karimpour Fard, M. (2020). Influence of random heterogeneity of the friction angle on bearing capacity factor N_γ . *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 14(1), 69-89.
- [31] Moshfeghi, S., and Eslami, A. (2019). Failure analysis of CPT-based direct methods for axial capacity of driven piles in sand. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(1), 1-19.
- [32] Al-Bittar, T., and Soubra, A. H. (2017). Bearing capacity of spatially random rock masses obeying Hoek–Brown failure criterion. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 215-229.
- [33] Chen, J., and Gilbert, R. B. (2017). Offshore pile system model biases and reliability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 55-69.
- [34] Manjari, K. G., Rao, K. B., and Babu, G. S. (2014). Stochastic model for settlement: footings on cohesionless soil. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(4), 269-283.
- [35] Najjar, S. S., Shammass, E., and Saad, M. (2014). Updated normalized load-settlement model for full-scale footings on granular soils. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(1), 63-80.
- [36] Reddy, S. C., and Stuedlein, A. W. (2013). Accuracy and reliability-based region-specific recalibration of dynamic pile formulas. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(3), 163-183.
- [37] Ahmed, A., and Soubra, A. H. (2012). Extension of subset simulation approach for uncertainty propagation and global sensitivity analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(3), 162-176.
- [38] Ahmed, A., and Soubra, A. H. (2012). Probabilistic analysis of strip footings resting on a spatially random soil using subset simulation approach. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(3), 188-201.
- [39] Houmadi, Y., Ahmed, A., and Soubra, A. H. (2012). Probabilistic analysis of a one-dimensional soil consolidation problem. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(1), 36-49.
- [40] Uzielli, M., and Mayne, P. W. (2012). Load-displacement uncertainty of vertically loaded shallow footings on sands and effects on probabilistic settlement estimation. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(1), 50-69.

Retaining Structure

- [41] Yáñez-Godoy, H., Mokeddem, A., and Elachachi, S. M. (2017). Influence of spatial variability of soil friction angle on sheet pile walls' structural behaviour. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(4), 299-314.
- [42] Dasgupta, U. S., Chauhan, V. B., and Dasaka, S. M. (2017). Influence of spatially random soil on lateral thrust and failure surface in earth retaining walls. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(3), 247-256.
- [43] Gong, W., Juang, C. H., and Martin, J. R. (2016). Numerical integration method for computing reliability index of geotechnical system. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(2), 109-120.
- [44] Daryani, K. E., and Mohamad, H. (2014). System reliability-based analysis of cantilever retaining walls embedded in granular soils. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(3), 192-201.

Mining Engineering

- [45] Shadab Far, M., Wang, Y., and Dallo, Y. A. (2019). Reliability analysis of the induced damage for single-hole rock blasting. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(1), 82-98.
- [46] Bauer, J., Puła, W., and Wyjadłowski, M. (2015). Effect of partial mining of shaft protection pillar in terms of reliability index. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(4), 242-249.
- [47] Torikian, H., and Kumral, M. (2014). Analyzing reproduction of correlations in Monte Carlo simulations: application to mine project valuation. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(4), 235-249.
- [48] Wachtel, T., Quaranta, J., van Zyl, D., and Siriwardane, H. (2014). Event tree analysis for room and pillar mining affecting permeability beneath surface bodies of water. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(2), 106-116.

Underground Engineering

- [49] Dematteis, A., and Soldo, L. (2015). The geological and geotechnical design model in tunnel design: estimation of its reliability through the R-Index. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(4), 250-260.
- [50] Zetterlund, M. S., Norberg, T., Ericsson, L. O., Norrman, J., and Rosén, L. (2015). Value of information analysis in rock engineering: a case study of a tunnel project in Äspö Hard Rock Laboratory. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(1), 9-24.
- [51] Bergman, N., Al-Naqshabandy, M. S., and Larsson, S. (2013). Variability of strength and deformation properties in lime–cement columns evaluated from CPT and KPS measurements. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(1), 21-36.

Earthquake Engineering

- [52] Shen, M., Juang, C. H., Ku, C. S., and Khoshnevisan, S. (2019). Assessing effect of dynamic compaction on liquefaction potential using statistical methods—a case study. *Georisk: Assessment and Management of Risk for Engineered Systems and*

Geohazards, 13(4), 341-348.

- [53] Nikellis, A., Eshun, K. O., Dyanati, M., Roke, D. A., Huang, Q., Chandra, A., and Sett, K. (2018). Effect of site-specific soil nonlinearities and uncertainties on ground motion intensity measures and structural demand parameters. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(4), 279-296.
- [54] Saygili, G. (2017). Probabilistic assessment of soil liquefaction considering spatial variability of CPT measurements. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 197-207.
- [55] Christian, J. T., and Baecher, G. B. (2016). Sources of uncertainty in liquefaction triggering procedures. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 242-250.
- [56] Abdollahi, A., and Gharibdoost, H. (2016). Seismic potential of the North Qazvin zone, Alborz. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(3), 213-222.
- [57] Hu, J. L., Tang, X. W., and Qiu, J. N. (2015). A Bayesian network approach for predicting seismic liquefaction based on interpretive structural modeling. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 200-217.
- [58] Zentner, I., and Borgonovo, E. (2014). Construction of variance-based metamodels for probabilistic seismic analysis and fragility assessment. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(3), 202-216.
- [59] Muduli, P. K., Das, S. K., and Bhattacharya, S. (2014). CPT-based probabilistic evaluation of seismic soil liquefaction potential using multi-gene genetic programming. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(1), 14-28.
- [60] Juang, C. H., Ching, J., and Luo, Z. (2013). Assessing SPT-based probabilistic models for liquefaction potential evaluation: a 10-year update. *Georisk: Assessment and management of risk for engineered systems and geohazards*, 7(3), 137-150.
- [61] Bhattacharya, A., Vöge, M., Arora, M. K., Sharma, M. L., and Bhasin, R. K. (2013). Surface displacement estimation using multi-temporal SAR interferometry in a seismically active region of the Himalaya. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(3), 184-197.
- [62] Zentner, I. (2013). Simulation of non-stationary conditional ground motion fields in the time domain. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(1), 37-48.
- [63] Vipin, K. S., and Sitharam, T. G. (2012). A performance-based framework for assessing liquefaction potential based on CPT data. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(3), 177-187.

Geoenvironmental Engineering

- [64] Santhosh, L. G., and Sivakumar Babu, G. L. (2018). Landfill site selection based on reliability concepts using the DRASTIC method and AHP integrated with GIS—a case study of Bengaluru city, India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 234-252.
- [65] Geetha Manjari, K., and Sivakumar Babu, G. L. (2018). Erratum: This article refers to: Probabilistic analysis of groundwater and radionuclide transport model from near surface disposal facilities. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), i.

- [66] Geetha Manjari, K., and Sivakumar Babu, G. L. (2018). Probabilistic analysis of groundwater and radionuclide transport model from near surface disposal facilities. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), 60-73.
- [67] Sujitha, S., and Babu, G. S. (2017). System reliability analysis for near-surface radioactive waste disposal facilities. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(4), 315-322.
- [68] Sujitha, S., Dilip, D. M., and Sivakumar Babu, G. L. (2017). Time-dependent reliability analysis for radionuclide migration in groundwater in near surface disposal facility using the enhanced Monte Carlo method. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 208-214.

Ground Improvement

- [69] Bari, M. W., and Shahin, M. A. (2015). Three-dimensional finite element analysis of spatially variable PVD improved ground. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(1), 37-48.

Pipeline

- [70] Bayramov, E., Buchroithner, M. F., and McGurty, E. (2012). Prediction reliability, quantitative differences and spatial variations of erosion models for long-range petroleum and gas infrastructure. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(4), 252-272.

Software

- [71] Wu, X. Z. (2017). Implementing statistical fitting and reliability analysis for geotechnical engineering problems in R. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 173-188.

RELIABILITY-BASED DESIGN AND LIMIT STATE DESIGN

Theory and Methodology

- [1] Phoon, K. K. (2017). Role of reliability calculations in geotechnical design. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 4-21.
- [2] Duncan, J. M., and Sleep, M. (2017). The need for judgement in geotechnical reliability studies. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 70-74.
- [3] Khoshnevisan, S., Gong, W., Wang, L., and Juang, C. H. (2014). Robust design in geotechnical engineering—an update. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(4), 217-234.
- [4] van Staveren, M. T. (2013). Geotechnics on the move: guidance for a risk-driven way of working. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(3), 225-236.
- [5] van der Krogt, M. G., Schweckendiek, T., and Kok, M. (2019). Uncertainty in spatial average undrained shear strength with a site-specific transformation model. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 226-236.

Codes and Guidelines

- [6] Suzuki, M., and Shirato, M. (2019). New developments of performance-based design codes and practice, honouring Prof. Yusuke Honjo. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 165.
- [7] Orr, T. L. (2019). Honing safety and reliability aspects for the second generation of Eurocode 7. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 205-213.
- [8] Katsigiannis, G., Ferreira, P., and Fuentes, R. (2018). HYD verifications using numerical methods. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), 45-59.
- [9] Orr, T. L. (2017). Defining and selecting characteristic values of geotechnical parameters for designs to Eurocode 7. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 103-115.

Slope and Dam

- [10] Pandit, B., and Babu, G. S. (2018). Reliability-based robust design for reinforcement of jointed rock slope. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(2), 152-168.
- [11] Xiao, T., Li, D. Q., Cao, Z. J., and Tang, X. S. (2017). Full probabilistic design of slopes in spatially variable soils using simplified reliability analysis method. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 146-159.
- [12] Nishimura, S. I., Shuku, T., and Shibata, T. (2016). Reliability-based design of earth-fill dams to mitigate damage due to severe earthquakes. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(1), 83-90.
- [13] Phoon, K. K., and Retief, J. V. (2015). ISO2394: 2015 Annex D (reliability of geotechnical structures). *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 125-127.

Foundation

- [14] Lesny, K. (2019). Probability-based derivation of resistance factors for bearing capacity prediction of shallow foundations under combined loading. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(4), 284-290.
- [15] Abou Diab, A., Najjar, S., and Sadek, S. (2018). Reliability-based design of spread footings on fibre-reinforced clay. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(2), 135-151.
- [16] Kahiel, A., Najjar, S., and Sadek, S. (2017). Reliability-based design of spread footings on clays reinforced with aggregate piers. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 75-89.
- [17] Huffman, J. C., Martin, J. P., and Stuedlein, A. W. (2016). Calibration and assessment of reliability-based serviceability limit state procedures for foundation engineering. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 280-293.
- [18] Khoshnevisan, S., Wang, L., and Juang, C. H. (2016). Simplified procedure for reliability-based robust geotechnical design of drilled shafts in clay using spreadsheet. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(2), 121-134.
- [19] Bach, D., and van Gelder, P. (2014). Incorporating set-up into LRFD method for drilled shafts. *Georisk: Assessment and Management of Risk for Engineered*

Systems and Geohazards, 8(2), 81-91.

- [20] Nanazawa, T., Kouno, T., Sakashita, G., and Oshiro, K. (2019). Development of partial factor design method on bearing capacity of pile foundations for Japanese Specifications for Highway Bridges. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 166-175.
- [21] Nanazawa, T., Kouno, T., Sakashita, G., and Nakaura, T. (2019). Development of partial factor design method on bending strength of piles for Japanese Specifications for Highway Bridges. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 176-184.
- [22] Samtani, N. C., and Kulicki, J. M. (2019). Calibration of foundation movements for AASHTO LRFD bridge design specifications. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 185-194.

Retaining Structure

- [23] Bathurst, R. J., and Javankhoshdel, S. (2017). Influence of model type, bias and input parameter variability on reliability analysis for simple limit states in soil–structure interaction problems. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 42-54.
- [24] Khoshnevisan, S., Wang, L., and Juang, C. H. (2017). Response surface-based robust geotechnical design of supported excavation–spreadsheet-based solution. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 90-102.
- [25] Wang, Y. (2013). MCS-based probabilistic design of embedded sheet pile walls. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(3), 151-162.
- [26] Takenobu, M., Miyata, M., Otake, Y., and Sato, T. (2019). A basic study on the application of LRFD in “the technical standard for port and harbour facilities in Japan”: a case of gravity type quay wall in a persistent design situation. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3), 195-204.
- [27] Bathurst, R. J., Allen, T. M., Miyata, Y., Javankhoshdel, S., and Bozorgzadeh, N. (2019). Performance-based analysis and design for internal stability of MSE walls. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(3) 214-225.

GEOTECHNICAL HAZARDS AND RISK

Theory and Methodology

- [1] Liu, Z., Nadim, F., Garcia-Aristizabal, A., Mignan, A., Fleming, K., and Luna, B. Q. (2015). A three-level framework for multi-risk assessment. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(2), 59-74.

Codes and Guidelines

- [2] Spross, J., Olsson, L., and Stille, H. (2018). The Swedish Geotechnical Society’s methodology for risk management: a tool for engineers in their everyday work. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 183-189.
- [3] Enright, P. A. (2015). Is there a tolerable level of risk from natural hazards in New Zealand?. *Georisk: Assessment and Management of Risk for Engineered Systems*

and Geohazards, 9(1), 1-8.

Landslide

- [4] Singh, A., Kanungo, D. P., and Pal, S. (2019). A modified approach for semi-quantitative estimation of physical vulnerability of buildings exposed to different landslide intensity scenarios. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(1), 66-81.
- [5] Basu, T., and Pal, S. (2018). Identification of landslide susceptibility zones in Gish River basin, West Bengal, India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), 14-28.
- [6] Mondal, S., and Mandal, S. (2018). RS and GIS-based landslide susceptibility mapping of the Balason River basin, Darjeeling Himalaya, using logistic regression (LR) model. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), 29-44.
- [7] Robinson, T. R., Davies, T. R., Wilson, T. M., Orchiston, C., and Barth, N. (2016). Evaluation of coseismic landslide hazard on the proposed Haast-Hollyford Highway, South Island, New Zealand. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(2), 146-163.
- [8] Marchesini, I., Santangelo, M., Guzzetti, F., Cardinali, M., and Bucci, F. (2015). Assessing the influence of morpho-structural setting on landslide abundance. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(4), 261-271.
- [9] Wen, H. (2015). A susceptibility mapping model of earthquake-triggered slope geohazards based on geo-spatial data in mountainous regions. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(1), 25-36.
- [10] Sousa, R. L., Karam, K., and Einstein, H. H. (2014). Exploration analysis for landslide risk management. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(3), 155-170.
- [11] Ngadisih, Yatabe, R., Bhandary, N. P., and Dahal, R. K. (2014). Integration of statistical and heuristic approaches for landslide risk analysis: a case of volcanic mountains in West Java Province, Indonesia. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(1), 29-47.
- [12] Vijith, H., Krishnakumar, K. N., Pradeep, G. S., Ninu Krishnan, M. V., and Madhu, G. (2014). Shallow landslide initiation susceptibility mapping by GIS-based weights-of-evidence analysis of multi-class spatial data-sets: a case study from the natural sloping terrain of Western Ghats, India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(1), 48-62.
- [13] Sanchez, M. E., Pastor, M., and Romana, M. G. (2013). Modelling of short runout propagation landslides and debris flows. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(4), 250-266.
- [14] Bhandary, N. P., Yatabe, R., Dahal, R. K., Hasegawa, S., and Inagaki, H. (2013). Areal distribution of large-scale landslides along highway corridors in central Nepal. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(1), 1-20.
- [15] Mondal, S., Mukherjee, A., and Maiti, R. (2012). Application of a RS-and GIS-based semi-quantitative approach (analytical hierarchy process–AHP) in landslide hazard risk assessment of the Shivkhola Watershed, Darjiling Himalaya. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(4), 203-220.
- [16] Rawat, P. K., and Sharma, A. K. (2012). Geo-diversity and its hydrological response in relation to landslide susceptibility in the Himalaya: a GIS-based case

study. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(4), 229-251.

- [17] Raman, R., and Punia, M. (2012). The application of GIS-based bivariate statistical methods for landslide hazards assessment in the upper Tons river valley, Western Himalaya, India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(3), 145-161

Earthquake Engineering

- [18] García-Bustos, S., Landín, J., Moreno, R., Chong, A. S. E., Mulas, M., Mite, M., & Cárdenas, N. (2020). Statistical analysis of the largest possible earthquake magnitudes on the Ecuadorian coast for selected return periods. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 14(1), 56-68.
- [19] Yu, K., Chouinard, L. E., and Rosset, P. (2016). Seismic vulnerability assessment for Montreal. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(2), 164-178.
- [20] Lin, J. W. (2014). Ionospheric precursor for a deep earthquake (~ 378 km) near Papua New Guinea occurred on 7 July 2013, $M_w = 7.2$ in the environment of geomagnetic storm using two-dimensional principal component analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(2), 141-146.
- [21] Dixit, A. M., Yatabe, R., Guragain, R., Dahal, R. K., and Bhandary, N. P. (2014). Non-structural earthquake vulnerability assessment of major hospital buildings in Nepal. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(1), 1-13.
- [22] Kechaidou, M. G., Sirakoulis, G. C., and Scordilis, E. M. (2013). Modelling real earthquake activity with reverse engineering based on evolutionary computation methods. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(4), 275-288.
- [23] Huttenlau, M., and Stötter, J. (2012). Risk-based damage potential and loss estimation of earthquake scenarios in the moderate endangered Austrian Federal Province of Tyrol. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(2), 105-127.
- [24] Cockburn, G., and Tesfamariam, S. (2012). Earthquake disaster risk index for Canadian cities using Bayesian belief networks. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(2), 128-140.
- [25] Ramanna, C. K., and Dodagoudar, G. R. (2012). Probabilistic seismic hazard analysis using kernel density estimation technique for Chennai, India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(1), 1-15.
- [26] Saygili, G. (2012). Probabilistic seismic hazard assessment for the sliding displacement and liquefaction potential of offshore sites. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 6(1), 16-35.

Dam and Levee

- [27] Curran, A., De Bruijn, K. M., & Kok, M. (2020). Influence of water level duration on dike breach triggering, focusing on system behaviour hazard analyses in lowland rivers. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 14(1), 26-40.
- [28] Vahedifard, F., Sehat, S., and Aanstoos, J. V. (2017). Effects of rainfall,

- geomorphological and geometrical variables on vulnerability of the lower Mississippi River levee system to slump slides. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(3), 257-271.
- [29] Kok-Kwang, P. (2016). Spotlight Article: Uncertainty in dam safety risk analysis.
- [30] Baecher, G. B. (2016). Uncertainty in dam safety risk analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(2), 92-108.
- [31] Tannant, D. D. (2015). Changes to dam safety management in British Columbia triggered by failure of a small earth dam. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 148-157.

Rock Fall

- [32] Macciotta, R., Martin, C. D., Cruden, D. M., Hendry, M., and Edwards, T. (2017). Rock fall hazard control along a section of railway based on quantified risk. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(3), 272-284.
- [33] Ferrari, F., Thoeni, K., Giacomini, A., and Lambert, C. (2016). A rapid approach to estimate the rockfall energies and distances at the base of rock cliffs. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(3), 179-199.
- [34] Macciotta, R., Martin, C. D., Edwards, T., Cruden, D. M., and Keegan, T. (2015). Quantifying weather conditions for rock fall hazard management. *Georisk: assessment and management of risk for engineered systems and geohazards*, 9(3), 171-186.
- [35] Iannacone, J. P., Quan Luna, B., and Corsini, A. (2013). Forward simulation and sensitivity analysis of run-out scenarios using MassMov2D at the Trafoi rockslide (South Tyrol, Italy). *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(4), 240-249.
- [36] Admassu, Y., and Shakoor, A. (2013). Computer simulation-based evaluation of rock fall roll-out distances for catchment ditch design in Ohio, USA. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(3), 198-208.

Flood

- [37] Sharma, P. K. (2018). Rainfall flood hazard at nuclear power plants in India. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 218-233.
- [38] Custer, R., and Nishijima, K. (2018). Probabilistic disaggregation of a spatial portfolio of exposure for natural hazard risk assessment. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(1), 1-13.
- [39] Guru, N., and Jha, R. (2016). Flood estimation in Mahanadi river system, India using partial duration series. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(2), 135-145.
- [40] Vijith, H., Prasannakumar, V., Krishnan, M. N., and Pratheesh, P. (2015). Morphotectonics of a small river basin in the South Indian granulite terrain: An assessment through spatially derived geomorphic indices. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(3), 187-199.
- [41] Courage, W., Vrouwenvelder, T., van Mierlo, T., and Schweckendiek, T. (2013). System behaviour in flood risk calculations. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(2), 62-76.

- [42] Jongejan, R. B., and Calle, E. O. F. (2013). Calibrating semi-probabilistic safety assessments rules for flood defences. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(2), 88-98.
- [43] Zhang, L. M., Xu, Y., Liu, Y., and Peng, M. (2013). Assessment of flood risks in Pearl River Delta due to levee breaching. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(2), 122-133.

Fire

- [44] Tong, R., Wang, B., Li, J., Tang, S., Zhang, B., and Tan, Z. (2015). A risk-based approach for crowd evacuation performance evaluation under metro fire. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(2), 75-95.
- [45] Osaragi, T. (2013). Towards an incombustible city: building reconstruction in potential and probable fireproofing of urban lots. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(4), 289-299.

Underground Engineering

- [46] Napa-García, G. F., Beck, A. T., and Celestino, T. B. (2018). Risk analysis of fractured rock mass underground structures. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(2), 123-134.

Typhoon

- [47] Takagi, H., Xiong, Y., and Furukawa, F. (2018). Track analysis and storm surge investigation of 2017 Typhoon Hato: were the warning signals issued in Macau and Hong Kong timed appropriately?. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(4), 297-307.

Sinkholes

- [48] Parise, M. (2015). A procedure for evaluating the susceptibility to natural and anthropogenic sinkholes. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 9(4), 272-285.

City Planning

- [49] Li, J., Zhang, B., Tang, S., and Tong, R. (2014). A risk-based approach and its application on land-use planning in crowd massing public places. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 8(2), 92-105.

Atmospheric Hazards

- [50] Nastos, P. T., and Matsangouras, I. T. (2013). A proposed Atmospheric Hazards Early Warning System (AHEWS) incorporated in the new structure of the Greek Regional Administration 'Kallikratis'. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(4), 267-274.

Energy

- [39] Seraj, S., and Delavar, M. R. (2019). An extended GIS-based Dempster–Shafer theory for play-based hydrocarbon exploration risk analysis under spatial uncertainty conditions, case study: Zagros sedimentary basin, Iran. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 13(2), 131-144.

DATA ANALYTICS AND MACHINE LEARNING

- [1] Zhang, L., Wu, F., Zheng, Y., Chen, L., Zhang, J., and Li, X. (2018). Probabilistic calibration of a coupled hydro-mechanical slope stability model with integration of multiple observations. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 12(3), 169-182.
- [2] Yang, W., Xu, Y., and Wang, J. P. (2017). Characterising soil property in an area with limited measurement: a Bayesian approach. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(2), 189-196.
- [3] Aladejare, A. E., and Wang, Y. (2017). Evaluation of rock property variability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 22-41.
- [4] Ering, P., and Sivakumar Babu, G. L. (2017). A Bayesian framework for updating model parameters while considering spatial variability. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(4), 285-298.
- [5] Papaioannou, I., and Straub, D. (2017). Learning soil parameters and updating geotechnical reliability estimates under spatial variability—theory and application to shallow foundations. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 11(1), 116-128.
- [6] Wang, Y., Akeju, O. V., and Cao, Z. (2016). Bayesian Equivalent Sample Toolkit (BEST): an Excel VBA program for probabilistic characterisation of geotechnical properties from limited observation data. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(4), 251-268.
- [7] Vardon, P. J., Liu, K., and Hicks, M. A. (2016). Reduction of slope stability uncertainty based on hydraulic measurement via inverse analysis. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 10(3), 223-240.
- [8] Depina, I., Le, T. M. H., Eiksund, G., and Strøm, P. (2016). Cone penetration data classification with Bayesian Mixture Analysis. *Georisk: Assessment and management of risk for engineered systems and geohazards*, 10(1), 27-41.
- [9] Medina-Cetina, Z., and Esmailzadeh, S. (2014). Joint states of information from different probabilistic geo-profile reconstruction methods. *Georisk: assessment and management of risk for engineered systems and geohazards*, 8(3), 171-191.
- [10] Schweckendiek, T., and Vrouwenvelder, A. C. W. M. (2013). Reliability updating and decision analysis for head monitoring of levees. *Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards*, 7(2), 110-121.