

Wednesday, July 26, 2023

8:30 – 10:30 a.m.			
Morning Plenary Session Salon AB Moderators: Shadi Najjar and Limin Zhang Keynote Lecture: Liquefaction Issues in Risk Analyses for Embankments, Ross Boulanger, University of California Davis Keynote Lecture: Risk Evaluation for Offshore Spudcan Installation, Lisa Li, Harbin Institute of Technology Featured Paper: Risk-Based Earthen Dam Design and Mitigation Considering ALARP for All Potential Consequences, William Roberds, Alan Keizur, Anand Govindasamy, Peter Chapman Student Competition: Presentations from Finalists Questions and Answers			
Track A Washington Ballroom	Track B Salon C	Track C Wilson/Harrison	Track D Salon AB
11:00 a.m. – 12:30 p.m.			
Technical Sessions			
Advances in Computational Methods for Geotechnical Uncertainty Quantification, Modeling and Risk Assessment Moderators: Te Xiao and Jianye Ching	Data-Driven and Probabilistic Site Characterization - II Moderators: Yu Wang	Risk Assessment and Management in Offshore Engineering & Georisk in Engineering Education Moderators: Zenon Medina Cetina and Lei Wang	Application of Bayesian Methods in Geotechnical Engineering Moderators: Iason Papaioannou and Johan Spross
<p>Quantile-Based First-Order Second-moment Method for Efficient Slope Reliability Analysis, Chengchuan Yin, Zhiyong Yang, Te Xiao, Xueyou Li</p> <p>Enhancing Failure Probability Estimation for a Site-Specific Slope by Considering Its Survival Records from Past Rainfall Events, Liu Xin, Yu Wang</p> <p>Estimation of Limit State Probabilities of Consolidation Settlement by Adaptive Gaussian Process Regression and Importance Sampling, Tomoka Nakamura, Ikumasa Yoshida, Yu Otake</p> <p>Reducing Uncertainty and Risk of a Dam by Site Investigation, Quantitative Analysis, Model Calibration, and Observational Method, Dan Ding, Andrew Boeckmann, Paul Axtell, Eric Loehr</p> <p>3D City-Scale Marine Geological Model for Hong Kong, Haifeng Zou, Xiao Te, Yifei Zhang, Yuebin Liu, Limin Zhang</p> <p>Probabilistic Analysis of a Nailed Wall Considering Excavation Stages, Shengfeng Huang, Pooya Dastpak, Sina Javankhoshdel, Daniel Dias, Rita Sousa</p>	<p>Data-Driven Site Characterization Based on a Markov Random Field Model, Takayuki Shuku</p> <p>Optimization of 3D Borehole Layout Strategy Considering Stratigraphic Uncertainty, Wei Yan, Wan-Huan Zhou, Ping Shen</p> <p>Estimation of Spatial Distribution Considering Indirect Data Using Gaussian Process Regression, Yuto Tsuda, Yukihisa Tomizawa, Ikumasa Yoshida, Yu Otake</p> <p>Efficient Simulation of 2D Non-Stationary CPT Profiles from Incomplete Dataset Using Machine Learning Methods, Tengyuan Zhao, Yu Wang</p> <p>Inferring Semi-parametric Gaussian Process Model Parameters for Missing Geotechnical Data Prediction, Jiawei Xi, Jinsong Huang, Yuting Zhang</p> <p>The Effect of Posterior Distribution Sampling CPT Rate-effect Corrections, Stefano Collico, Marcos Arroyo</p> <p>Inferring Spatial Variation of Soil Classification by Both CPT and Borehole Data, Hassan Kamyab, Jianye Ching</p> <p>A New Performance Metric for 2D/3D Data-driven Site Characterization Methods, Takayuki Shuku</p>	<p>Influences of Initial Conditions of Submarine Debris Flows on Their Runout Scenarios in Shenhu Area, South China Sea, Yangming Chen, Lulu Zhang</p> <p>Axial Cyclic Behavior of FRP Composite Seawater Sea-Sand Concrete Piles, Numan Malik, Wenbo Chen, Jian-Hua Yin, Pei-Chen Wu, Ze-Jian Chen</p> <p>Remote Sensing-Based Risk Assessment of Coastal Erosion to Offshore Communities, Zaid Suleiman, Xiong Yu</p> <p>Risk Assessment/Avoidance for Impacts of Dredging on Existing Shoreline Structures, Rakam Lama Tamang, Michael Byle, Vinay Singhal, Senda Ozkan</p> <p>Deterministic and Probabilistic Rock Plane Slope Stability Analysis, Jiliang Li, Thiago Leao, Jinyuan Zhai</p> <p>Current Status of GeoRisk Education in Japan, Natsuki Doi, Takayuki Shuku</p> <p>Developing Mixed Reality Game for Enhanced Learning of Geotechnical Experiments and Geotechnical Design, Chenchen Huang, Luobin Cui, Cheng Zhu, Ying Tang</p>	<p>Effect of Learning Function on Reliability Analysis of Geotechnical Engineering Systems Using Adaptive Bayesian Compressive Sensing and Monte Carlo Simulation, Peiping Li, Yu Wang</p> <p>Calibration of Highly Computationally Intensive Propagation Models of Flow-Like Natural Hazards, Colette Buchs, Jocelyn Minini</p> <p>A Simplified Method of Incorporating Testing Data and Monitored Behaviour for Predicting Surface Settlement Using Bayesian Back Analysis, Merrick Jones, Shan Huang, Jinsong Huang</p> <p>Sequential Bayesian Updating of Spatially Varying Soil Parameters and Probability of Failure Caused by Rainfall Using Slope Performance Records, Min Pan, Shui-Hua Jiang, Xin Liu, Gu-Quan Song</p> <p>Dealing with Uncertainties in Detecting and Characterizing Quick Clay in Norway, Iason Papaioannou, Thi Minh Hue Le, Anteneh Tsegaya, Jean-Sebastien L'Heureux</p> <p>Benchmarking 3D Subsurface Models from Bayesian Compressive Sampling Using Real Data, Borui Lyu, Yu Wang</p>
2:00 – 4:00 p.m.			
Closing Plenary Session Salon AB Moderators: Limin Zhang and Shadi Najjar ASCE Award Winning Keynotes 2021 J. James R. Croes Medal: Chen, J., Gilbert, R. B., Ku, A., Chen, J. Y., & Marshall, P. W. Calibration of Model Uncertainties for Fixed Steel Offshore Platforms Based on Observed Performance in Gulf of Mexico Hurricanes, Bob Gilbert 2021 Thomas A. Middlebrooks Award: Bathurst, R. J., Allen, T. M., Lin, P., & Bozorgzadeh, N. LRFD Calibration of Internal Limit States for Geogrid MSE Walls, Richard Bathurst 2023 J. James R. Croes Medal: Stuedline, A., Huffman, J., Barbosa, A., and Belejo, A., Probabilistic Structural System Response to Differential Settlement Resulting from Spatially Variable Soil, Armin Stuedlein 2023 Arthur Casagrande Professional Development Award, Bryant Robbins A New Approach for Predicting Progression of Backward Erosion Piping Questions and Answers			