

## Monday, July 24, 2023

8:30 – 10:30 a.m.			
<b>Morning Plenary Session   Salon AB</b> <b>Moderator Name(s):</b> <b>Opening Statement:</b> Conference Chairs <b>Keynote Lecture:</b> Jianye Ching ( <i>Suzanne Lacasse Lecture</i> ) <b>Keynote Lecture:</b> Industry Speaker to be confirmed <b>Featured Paper: Social Media Crowdsourcing for Damage Assessment Following Earthquakes,</b> Lingyao Li, Zihui Ma, Michelle Bensi, Gregory Baecher <b>Featured Paper: Risk Assessment Framework for Statistical Analysis of Cut Slopes Using Track Inspection Videos and Satellite Imagery,</b> Michael Palese, Te Pei, Tong Qiu, Allan Zarembski, Chaopeng Shen, Joseph Palese <b>Questions and Answers</b>			
11:00 a.m. – 12:45 p.m.			
<b>Technical Sessions</b>			
<b>Track A   Washington Ballroom</b>	<b>Track B   Salon C</b>	<b>Track C   Wilson/Harrison</b>	<b>Track D   Salon AB</b>
<b>Georisk in Climate Change, Sustainability, and Decarbonization I</b> <b>Moderator:</b> Limin Zhang	<b>Probabilistic Analyses for Seismic Hazards</b> <b>Moderators:</b> Adrian Rodriguez-Marek and Ashly Cabas Mijares	<b>Data-Driven and Probabilistic Site Characterization I</b> <b>Moderators:</b> Hui Wang and Takayuki Shuku	<b>Panel-Based Session: Project Delivery Risk in Deep Foundations—Legal and Operational Approaches</b> <b>Moderators:</b> Matthew Glisson, Alex Filotti and Rick Kalson
<b>Assessing and Mitigating Flood Risk at United States Diplomatic Missions with High Settlement Susceptibility,</b> Corrie Campbell, David Keller, Noelle Trent, Julian Mancini <b>Storm-Based Forecasting of Natural Terrain Landslides,</b> Te Xiao, Limin Zhang <b>Uncertainty-Based Climate-adaptive Design Optimization of Shallow Foundation,</b> Yahidreza Mahmoudabadi, Nadarajah Ravichandran <b>River Damming Threats by Climate-driven Glacier Detachments,</b> Ruochen Jiang, Limin Zhang, Wenjun Lu <b>Prediction of Landslide Dam Formation Using Machine Learning Techniques,</b> Shihao Xiao, Limin Zhang, Te Xiao, Ruochen Jiang <b>A Unified Framework of Vulnerability Assessment for Valley-crossing Bridges Exposed to Compounding Mountain Geohazards,</b> Wenjun Lu, Limin Zhang, Ruochen Jiang <b>Risk of River Blockage Induced by Debris Flows,</b> Xin He, Limin Zhang, Wenjun Lu <b>Numerical Simulation of Post-Fire Hazards Using a Triggering-Propagation Model,</b> Liang Gao, Limin Zhang	<b>Probabilistic Seismic Hazard Assessment of Red Sea State, Eastern Sudan,</b> Mohammed Al-Ajamee <b>Regional Dependence of Strong Ground Motion in the Chilean Subduction Zone,</b> Gonzalo Montalva, Jorge Basualto, Esteban Saez, Gonzalo Yanez, Nicolas Bastias <b>Development of a Site Response and Hazard Model for the US Atlantic and Gulf Coastal Plains,</b> Cassie Gann-Phillips, Ashly Cabas, Chris Cramer, Zachary Miltello, James Kalklamanos <b>Estimation of Seismic Intensities Based on the Spatial Distribution of Asperities in Megathrust Earthquakes,</b> José Tomás Drápela, Gonzalo Montalva, Marcos Moreno, Alexandra Quiroga <b>Evaluating the Performance of Non-Ergodic Ground Motion Models in the Ridgecrest Area,</b> Jorge Macedo, Chenying Liu, Albert Kotke <b>Numerical Modelling of Kinematic Megathrust Rupture for Seismic Hazard Assessment in the Near-Source Regions,</b> Diego Cárdenas, Gonzalo Montalva <b>Modeling the Spatial Correlation of Systematic Source Effects in Non-Ergodic Ground Motion Models for the Ridgecrest Area,</b> Chenying Liu, Jorge Macedo <b>A Tool to Evaluate Deformation from Seismically Induced Landslides in the San Francisco Bay Area for System-Wide Risk Analyses,</b> Adam Wade, Michael Greenfield, Jennifer Wilson, Christopher Hitchcock, Michael Boone, Albert Kotke, Ben Leshchinsky, Joseph Wartman	<b>Discrete Element Modeling to Evaluate the Effects of Porosity on Regolith Responses during Cone Penetration Process,</b> Lei Wang, Omer Okur, Jesus Badal, Liang Zhang, Qiushi Chen <b>Uncertainty Quantification in Predicting UCS Using Fully Bayesian Gaussian Process Regression,</b> Chao Song, Tengyuan Zhao <b>Comparison of Data-Driven Site Characterization Methods in a Real Case History,</b> Takayuki Shuku, Menglu Huang <b>Assimilation of Meteorological and Hydrological Measurements in Landslide Early Warning Systems,</b> Ivan Depina <b>Machine Learning of Sparse Site Investigation Data for Landslide Risk Assessment,</b> Chao Shi, Yu Wang <b>Analysis of Tunnel Deformational Performance Considering Geological Uncertainty and Spatial Variability,</b> Qihao Jiang, Jinzhang Zhang, Dongming Zhang <b>Estimation of Random Field Parameters for Soil Properties: A New Bayesian Method,</b> Xiaohui Qi <b>Identifiability of Modified Cam Clay Model Parameters Using Triaxial Test Data Based on State Space Model,</b> Chang Tang, Zijun Cao, Yi Hong, Wei Li <b>Data-Driven Site Characterization for Benchmark Examples Using Sparse Bayesian Learning,</b> Jianye Ching	

2:00 – 3:45 p.m. <b>Technical Sessions</b>			
Track A   Washington Ballroom	Track B   Salon C	Track C   Wilson/Harrison	Track D   Salon AB
<p><b>Risk and Resilience in Excavation and Tunneling</b> Moderators: Bilal Ayyub and Sara Khoshnevisan</p> <p>Soil Clustering and Anomaly Detection Based on EPBM Data Using Principal Component Analysis and Local Outlier Factor, Dayu Apoji, Kenichi Soga</p> <p>Simulating Soil Stratigraphic Profile Using Image Warping, Hui Wang, Xingxing Wei</p> <p>Quantitative Rock Tunnel Face Risk Assessment via Multi-Source Data and Stacked Deep Learning Models, Mingliang Zhou, Hongwei Huang, Jiayao Chen</p> <p>Framework to Enable Regional 3D Probabilistic Assessment of Excavation Induced Structural Damage Using a Monte-Carlo Method, Jinyan Zhao, Stefan Ritter, Matthew DeJong</p> <p>Influence of Stratigraphic Uncertainty on Tunnel Face Stability, Qiuqing Pan, Zehang Qian, Qiuqing Pan, Xiaoxiong Men</p> <p>Feature Visualization of Key Operational Parameters During the Use of Deep Learning Technique with Attention-Based Mechanism for Pipe Jacking through ‘Soft Rocks’, Lit Yen Yeo, Pei Gee Kueh, Chung Siung Choo, Sue Han Lee, Dongming Zhang</p> <p>Water Level Rise Impact on Road Network Efficiency Considering Dysfunction of Road Tunnel: An Application Example in Suzhou, Yuxuan Xia, Chenjie Gong, Dongming Zhang, Hao Bai, Fan Jiang</p> <p>A Probabilistic Assessment of Marginal Facies in the Mercia Mudstone Group Formation for Tunneling Risk Management on the North Bristol Relief Sewer Project, Jacob Grasmick, Gareth Jones, Angus Maxwell</p>	<p><b>Big Data, Artificial Intelligence, and ML in Geo-Engineering</b> Moderators: Shadi Najjar and Mohamad Hallal</p> <p>Data-Driven Evaluation of Project Risk Registers, Abdolmajid Erfani, Zihui Ma, Qingbin Cui, Gregory Baecher</p> <p>Comparison of Hybrid Models Based on Infinite Slope Stability Analysis and Different Data-Driven Approaches for Regional Landslide Susceptibility Mapping, Xin Wei, Hai Li, Paolo Gardoni, Lulu Zhang</p> <p>Spatial Estimation of Unconfined Compressive Strength of Osaka Plain by Deep Learning and Consideration on Its Estimation Accuracy, Kazuhiro Oda, Shoko Yamamoto, Masahiro Kondoh</p> <p>An Intelligent Model Mixing Physics Mechanism and Field Data for Ground Settlement Prediction During Pipe-Roofing Excavation, Cunyang Zhang, Yue Pan, Yongmao Hou, Jinjian Chen</p> <p>A Comparative Study of Ensemble Methods for Prediction of Surface Settlement Induced by TBM Tunneling, Tatiana Richa, Selmane Libdaoui, Jean-Michel Pereira, Gilles Chapron, Lina Maria Guayacan Carrillo</p> <p>Tackling Geotechnical Risks in Tailings Dams Using High-Resolution UAV Imaging and Advanced Image Processing, Jose Gomez, Milad Ghahramanieisalou, Javad Sattarvand</p> <p>Stochastic Estimation of Hydraulic Conductivity Using Self-Organizing Map, Hyunki Kim, Kyueongmo Koo, Juram Kim, Lucas Vasca</p> <p>Landslide Susceptibility Mapping for Road Corridors by Using a Combined Interferometry SAR and Machine Learning Techniques, Ardy Arsyad</p>	<p><b>Modelling Spatial Variability in Geotechnical Engineering I</b> Moderators: Vaughan Griffiths</p> <p>Stochastic Analysis of Reservoir Bank Landslide by Considering the Spatial Random Field Characteristics of Hydraulic Parameter, Changhong Wang</p> <p>Reliability Evaluation of Slope in Spatially Variable Soils Using Sliced Inverse Regression-based Extreme Gradient Boosting, Zhi-Ping Deng, Kai-Rong Huang, Ke-Hong Zheng, Jing-Tai Niu</p> <p>Effect of Pseudo-Seismic Loadings on Probabilistic Slope Stability, Desheng Zhu, Lei Xia, Vaughan Griffiths, Gordon Fenton</p> <p>Influence of Ground Surface Surcharge on Deformational Behavior of Existing Shield Tunnel Based on 3D Random Field, Ning Tian, Jian Chen, Yuan Lu</p> <p>Proposed Framework to Assess the Influence of Ground Motion Residual Correlation on the Joint Seismic Hazard, Emily Gibson, Michelle Bensi</p> <p>Effect of Permeability Random Field on Piping Risk of a River Dike, Shin-ichi Nishimura, Go Kubota, Ryota Ohashi, Toshifumi Shibata, Takayuki Shuku</p> <p>Improvement of Bivariate Cross-Correlated Random Field Modeling Based on Archimedean Copulas, Yuan Lu, Jian Chen, Ning Tian</p> <p>Probabilistic Assessment of Landslide Risk Considering Spatial Variation of Soil Parameters, Himanshu Rana, G.L. Sivakumar Babu</p>	<p><b>Panel-Based Session: RBD in Code Development and Application</b> Moderators: Kerstin Lesny, Johan Spross</p>
<p>4:15 – 5:30 p.m. <b>Afternoon Plenary Session   Salon AB</b> Moderators:</p> <p><b>Keynote Lectures:</b> KK Phoon, <i>Singapore University of Technology &amp; Design</i></p> <p><b>Bright Spark Lecture:</b> <i>Revolutionizing Geotechnical Engineering: The Role of Machine Learning in Enhancing Prediction, Analysis, and Design</i>, Sara Khoshnevisan, <i>University of Cincinnati</i></p> <p><b>Feature Paper:</b> <i>Random Field Analysis of Laterally Loaded Monopile Foundations</i>, Vaughan Griffiths, Jinsong Huang, Gordon Fenton</p> <p><b>Questions and Answers</b></p>			

## Tuesday, July 25, 2023

8:30 – 10:30 a.m.			
<b>Morning Plenary Session   Salon AB</b> <b>Moderators:</b> <b>Opening Statement:</b> to be determined <b>Keynote Lecture:</b> Rodrigo Salgado, <i>Purdue University</i> <b>Keynote Lecture:</b> industry speaker to be confirmed <b>Feature Paper:</b> <i>Use of Artificial Neural Networks for Predicting Site Response from Ambient Noise HVSR</i> , Balakumar Anbazhagan, Adrian Rodriguez-Marek, Mohsen Esteghamati, Albert Kottke, Norman Abrahamson <b>Feature Paper:</b> <i>Risk and Return Analysis for Geotechnical Asset Management</i> , Ahmad Alhasan, Jerry Dimaggio <b>Questions and Answers</b>			
11:00 a.m. – 12:45 p.m.			
<b>Technical Sessions</b>			
<b>Track A   Washington Ballroom</b>	<b>Track B   Salon C</b>	<b>Track C   Wilson/Harrison</b>	<b>Track D   Salon AB</b>
<b>Modelling and Characterization of Geotechnical Uncertainty</b> <b>Moderators:</b> Wojciech Pula, Giovanna Vessia, Diego Di Curzio	<b>Georisk in Climate Change, Sustainability, and Decarbonization – II</b> <b>Moderators:</b> Limin Zhang	<b>Soil-Structure Interaction in Reliability Assessments of Geosystems</b> <b>Moderators:</b> Andy Leung, Tang Chong, Assile Abou Diab	<b>Panel-Based Session: Risks and Rewards of Foundation Re-Use</b> <b>Moderators:</b> Derrick Dasenbrock, Andy Boeckmann
<p><b>Development of the Optimal Linear Model for Estimation of Jet Grouting Pile Diameter under a Bayesian Framework</b>, Lin-Shuang Zhao, Yue Chen, Shanqing Li</p> <p><b>Model Uncertainty in Below-Slope Stress Conditions: Experimental and Numerical Investigation</b>, David Reid, Riccardo Fanni, Andy Fourie</p> <p><b>Statistical Estimation of Loess Landslide Impact by Multivariate Normal Distribution Models with Consideration of Transformation Methods</b>, Dongdong Yan, Tengyuan Zhao, Ling Xu</p> <p><b>Calculating Reliable Engineering Geological Model through Stochastic Co-Simulation Applied to CPTu Data</b>, Diego Di Curzio, Giovanna Vessia</p> <p><b>Effect of Uncertainty in Design Decisions for Driven Piles in Soil with High Boulder Content</b>, Chiara Cannizzaro, Maedeh Alinejad, Anders-Beijer Lundberg, Stefan Larsson, Johan Spröss</p> <p><b>Borehole and CPTU Integrated Probabilistic Site Characterization with Noisy Data Filtering</b>, Qiuzhu Ma, Haifeng Zou, Te Xiao, Limin Zhang</p> <p><b>Application of Interval Field Method to the Stability Analysis of Slopes in Presence of Uncertainties</b>, Chengxin Feng, Matthias Faes, Matteo Broggi, Michael Beer</p> <p><b>Automated Interpretation and Evaluation of Spatial Variability and Model Uncertainty in Geotechnical Site Characterization</b>, Xin Peng, Jesse Rauser</p>	<p><b>Calibrating Subseasonal to Seasonal Precipitation Forecasts to Improve Predictive Performance</b>, Zeqing Huang, Qirong Ding, Tongtiegang Zhao</p> <p><b>A Bayesian Forecast Framework for Climatic Parameters in Geotechnical Modeling</b>, Austin Olaiz, Claudia Zapata, Yasser Soltanpour</p> <p><b>A Comparative Study on the Vulnerability of Metro Network Efficiency: New York City, Shanghai and Jinan</b>, Hao Bai, Dongming Zhang, Jinhua Chang, Hongwei Huang, Bilal Ayyub, Changzheng Shao</p> <p><b>The Effect of Initial Ice Content on the Dynamics of Glacial Debris Flow Revealed from Multi-Phase Modelling</b>, Tengfei Wang, Ping Shen</p> <p><b>An Apparatus to Monitor Suction Evolution and Water Migration within a Soil Mass for Climate-Adaptive Infrastructure</b>, Aditi Rana, Ashwani Sharma, Ashutosh Kumar, Arash Azizi, Sravan Mugunda, Shraf Osman, David Toll</p> <p><b>Stability of Moraine Deposits under Changing Climate on the Tibetan Plateau</b>, Taosheng Huang, Ping Shen,</p> <p><b>Probability Density Function of Geometrical Properties of Soil Desiccation Cracks at Different Relative Humidity Levels</b>, Ali Vafaei, Farshid Vahedifard, Amin Amirlatifi, Chao-Sheng Tang</p> <p><b>Identifying and Predicting Potential Failure Zones in Unlined Flood Control Channels Using Geospatially Related Data and Numerical Analysis</b>, Justin Lindeman, Elijah Zane</p> <p><b>Analyses of Cold Region Pavement Adaptation for Climate Change</b>, Yusheng Jiang, Shafi Ulah, Xudong Fan, Xiang Yu</p>	<p><b>Reliability Assessment of Pile-Founded T-walls using Kriging Method</b>, Liang Zhang, Lei Wang</p> <p><b>Probabilistic Analysis of Layered Soil on Shallow Foundation Settlement Using a Hardening Soil Model</b>, Daniel Teshager, Marcín Chwala, Wojciech Pula</p> <p><b>Assessment of Model Uncertainty for Settlement-Prediction Models of Spread Footings on Clays Reinforced with Aggregate Piers</b>, Abdurrahman Almkati, Shadi Najjar, Salah Sadek</p> <p><b>Stone Column Ground Improvement Analysis: Gaps</b>, Wjdan Sahi, Haluk Aktan</p> <p><b>Effect of Installation on the Uplift Capacity of Helical Pile Considering Soil Spatial Variability</b>, Po Cheng, Yong Liu, Jiang Tao Yi</p> <p><b>Bearing Capacity of Strip Footings Seated on Granular Layers over Spatially Variable Undrained Soft Clay</b>, Richard Bathurst, Reza Jamshidi Chenari</p> <p><b>WUS-Based Reliability Analysis of Stabilizing Pile-Reinforced Slopes</b>, Tao Wang, Lepei Wang, Jian Ji</p> <p><b>Assessing Uncertainty in Consolidation Settlement Calculations</b>, Robert Bachus, Glenn Rix, Thomas Brandon</p>	

2:00 – 3:45 p.m.			
Technical Sessions			
Track A   Washington Ballroom	Track B   Salon C	Track C   Wilson/Harrison	Track D   Salon AB
<p><b>Risk and Reliability in Rock Engineering</b> Moderators: Johan Spross</p>	<p><b>Risk Assessment for Dams, Levees, Embankments, and Slopes – I</b> Moderators: Lei Wang</p>	<p><b>Uncertainty and Risk Characterization of Liquefaction</b> Moderators: Jack Montgomery</p>	<p><b>Panel-Based Session: Risk in Underground Construction</b> Moderators: Lizan Gilbert, Tom Pennington</p>
<p><b>Failure Probability Assessment of Rock Slopes: A Case Study on Baige Landslide</b>, Peng Zeng, Sheng Wang, Tianbin Li, Xiaoping Sun</p> <p><b>Bayesian Updating for Rock Properties Based on a Rock Database</b>, Takayuki Shuku, Yasuhiro Yokota, Kensuke Date, Masako Ishii, Takeru Kumagai</p> <p><b>Mining Applications for Probabilistic Design</b>, Catrin Edelbro, Jennifer Hellberg, Johan Spross</p> <p><b>Explainable Machine Learning Model for Rockfall Susceptibility Evaluation</b>, Haijia Wen, Jiwei Hu, Jialan Zhang, Xinzhi Zhou, Mingyong Liao</p> <p><b>Dirichlet Distribution for Tunnel Construction Class Proportions in Probabilistic Time and Cost Estimations</b>, Johan Spross, Jack Lidmar</p> <p><b>Small- and Medium-Scale Assessment of Rockfall Coefficients of Restitution</b>, Bruma Souza, Marion Bost, Jean Benoit, Philippe Reiffsteck, Christophe Pruvost, Nicolas Vermorel</p> <p><b>The Importance of Cross-Correlation in Probabilistic Analyses of Rock Slopes Using Generalized Hoek-Brown Criterion</b>, Joy Foley, Brigid Cami, Terence Ma, Sina Javankhoshdel, Jim Cremeens, Joe Carvalho</p> <p><b>Towards Real Time Ground Forecast for TBM Tunneling: Finding Label Errors in Datasets</b>, Saadeldin Mostafa, Beatriz Klink, Rita Sousa, Herbert Einstein</p>	<p><b>Probability of Levee Instability Following Rapid Drawdown</b>, Daniel VandenBerge, Prince Turkson</p> <p><b>An Extreme Weather-Related Risk Analysis Model for Embankment Dam: Causal Inference in Historic Data Statistics</b>, Fang Wang, Hongen Li, Yuxuan Pan, Jianguo Zhao</p> <p><b>Analysis of Climate Change Impact on Dam Safety Based on Dam Failure Cases in China</b>, Hongen Li, Fang Wang, Wenjie Rong, Jianguo Zhao</p> <p><b>Selection of Allowable Discretization Error for Reliability Analysis of Soil Slope Using KL-FORM</b>, Kai Zhong, Xiaohui Tan, Yuting Sun, Pengfei Zhang, Xiaole Dong</p> <p><b>The Stability Analysis of the Double-Row Steel Sheet Pile Cofferdam with Sandy and Cohesive Foundation under Surge Wave Action</b>, Ming Peng, Zhi Li, Yan Zhu, Jingliang Zhang</p> <p><b>Fragility Assessment of Lee Relief Wells During River Flooding</b>, Omar Alawneh, Sabarethinam Kameshwar, Jack Cadigan, Navid Jafari, Ye-Hong Chen, Frank Tsai</p> <p><b>Loss Assessment of Dike-Break Induced Flood Disaster: A Case Study in the Poyang Lake District in China</b>, Shui-Hua Jiang, Wen-Huan Li, He Huang, Huan-Le Zhi, Jinsong Huang</p> <p><b>Risk-Informed Approach to the Evaluation of Relief Wells for Levee Systems</b>, Stefan Flynn, Michael Navin</p>	<p><b>Evaluation of Liquefaction Probability of Earth-Fill Dam over Next 50 Years Using Geostatistical Method Based on CPTU</b>, Kazunari Imaide, Shin-ichi Nishimura</p> <p><b>Variability Quantification of LEAP 2017 Experiments</b>, Niithyagopal Goswami, Mourad Zeghal</p> <p><b>Development of Hazard Map for the Risk of Exceeding the Intolerable Liquefaction-Induced Settlement for a Powerline System, Portland, Oregon</b>, Michelle Deng, King Chin, Melanie Walling</p> <p><b>Uncertainty Characterization of Surface Lateral Displacement and Settlement of LEAP-2020 Experimental Data</b>, Mourad Zeghal, Alejandra Sepulveda</p> <p><b>A Tool To Evaluate Liquefaction and Resulting Permanent Ground Deformation in the San Francisco Bay Area</b>, Michael Greenfield, Michelle Guckenheimer, Adam Wade, Jennifer Wilson, Christopher Hitchcock, Albert Kottke, Michael Boone</p> <p><b>Uncertainty in Liquefaction-Induced Settlement in Numerical Simulations Due to Model Calibration</b>, Devdeep Basu, Jack Montgomery, Armin Stuedlein</p> <p><b>Liquefaction Hazard Assessment of Kathmandu Valley Using Deterministic and Probabilistic Approaches</b>, Indra Acharya, Mandip Subedi, Rajan KC</p> <p><b>SSHAC Evaluation of the Seismic Fragility for an Embankment Dam</b>, Martin McCann, Zach Ruby</p>	
<p>4:15 – 5:30 p.m.</p> <p><b>Afternoon Plenary Session   Salon AB</b> Moderator(s): <b>Keynote Lecture:</b> Sissy Nikolaou (NIST) <b>Bright Spark Lecture:</b> Seismic Site Response: Are We Investigating a Large Enough Spatial Area? Mohammad Hallal, UC Berkeley <b>Feature Paper:</b> Predicting Within-site Variability of Seismic Site Response Using a Geospatial Modeling Approach, Weiwei Zhan, Laurie Boise, James Kalkanos <b>Questions and Answers</b></p>			

## Wednesday, March 29, 2023

<p>8:30 – 10:30 a.m.</p>	<p><b>Morning Plenary Session   Salon AB</b>  <b>Moderators:</b>  <b>Opening Statement:</b> to be determined  <b>Keynote Lecture: Liquefaction Issues in Risk Analyses for Embankments,</b> Ross Boulanger, <i>UC Davis</i>  <b>Student Lecture:</b> Lisa Li, <i>Harbin Institute of Technology</i>  <b>Feature Paper: Risk-Based Earthen Dam Design and Mitigation Considering ALARP for All Potential Consequences,</b> William Roberds, Alan Keizur, Anand Govindasamy, Peter Chapman  <b>Student Competition: Short Presentations from Three Finalists</b>  <b>Questions and Answers</b></p>		
<p>Track A   Washington Ballroom</p>	<p>Track B   Salon C</p>	<p>Track C   Wilson/Harrison</p>	<p>Track D   Salon AB</p>
<p>11:00 a.m. – 12:30 p.m. <b>Technical Sessions</b></p>			
<p><b>Risk Assessment for Dams, Levees, Embankments, and Slopes - II</b>  <b>Moderators:</b> Farrokh Nadim and Jinhui Li</p>	<p><b>Modelling Spatial Variability in Geotechnical Engineering - II</b>  <b>Moderators:</b> Vaughan Griffiths</p>	<p><b>Risk Assessment and Management in Offshore Engineering &amp; Georisk in Engineering Education</b>  <b>Moderators:</b> Zenon Medina Cetina and Lei Wang</p>	<p><b>Application of Bayesian Methods in Geotechnical Engineering</b>  <b>Moderators:</b> Iason Papaioannou</p>
<p><b>Rockfill Dam Constitutive Models Calibration Using Gaussian Process Regression-response Surface Model with Jaya Optimizer,</b> Fei Kang, Siyuan Wu, Junjie Li  <b>Reliability-Based Design of Infinite Frictional Slopes Reinforced by Inclusion of Fibers,</b> Assile Abou Diab, Shadi Najjar, Salah Sadek  <b>How Intelligent Monitoring Solutions Can Mitigate Slope Failure Risk,</b> Raphael Victor  <b>Reclamation's Approach to Construction Risk Analysis and Risk Assessment,</b> Dom Galic  <b>Side Slope Stability Analysis during Landslide Dam Breaching Using SPH Method,</b> Mingjun Zhou, Zhenming Shi, Peng Ming, Gongding Zhang, Cui Kahlil Fredrick  <b>Effects of Bimodal SWCC on Unsaturated Loess Slope Reliability Analysis,</b> Rui Tao, Zijun Cao, Yutao Pan  <b>A Framework for Quantitative Risk Analysis of Dams,</b> Martin McCann, Glenn Rix  <b>A Novel Damage Classification System for Tailing Dams under Extreme Events: Earthquakes and Heavy Rainfall,</b> Sukanta Das</p>	<p><b>Dynamic Reliability-Based Design of Slopes in Spatially Variable Soils Based on an Inverse FORM,</b> Xian Liu, Yadong Liu, Xueyou Li, Zhiyong Yang  <b>Constant Covariance Matrix Approach in the Random Bearing Capacity Evaluation of Two-Layered Soil,</b> Marcin Chwala, Marek Kawa, Wojciech Pula  <b>Quantifying Uncertainty in the Critical Secant Gradient Function,</b> Bryant Robbins, Vaughan Griffiths  <b>Characteristic Strength of a Slope with Spatial Variability and Cross-Correlation,</b> Scott Cylwik, Sina Javankhoshdel, Brigid Cami, Terence Ma  <b>Probabilistic Assessment of Earthen Levees Considering Soil Spatial Variability,</b> Weiwei Zhan, Liang Zhang, Lei Wang  <b>Spatial Variability Characterization of Marine Geotechnical Properties Using the Bayesian Conditional Co-simulation Method,</b> Jiabao Xu, Lulu Zhang, Yu Wang  <b>Identification of Horizontal Auto-Correlation Parameters Using Inclined Cone Penetration Tests – Preliminary Results,</b> Yong-Keng Tan, Jianye Ching</p>	<p><b>Evaluation of Rotational Stiffness for Uplifted Wind Turbine Gravity Foundation in Clays,</b> Jixiang Li, Dongyuan Wang, Eric Natambakwa, Yunhan Huang, Ben Krause  <b>Influences of Initial Conditions of Submarine Debris Flows on Their Runout Scenarios in Shenhu Area, South China Sea,</b> Yangming Chen, Lulu Zhang  <b>Axial Cyclic Behavior of FRP Composite Seawater Sea-sand Concrete Piles,</b> Numan Malik, Wenbo Chen, Jian-Hua Yin, Pei-Chen Wu, Ze-Jian Chen  <b>Remote Sensing-Based Risk Assessment of Coastal Erosion to Offshore Communities,</b> Zaid Suleiman, Xiong Yu  <b>Risk Assessment/Avoidance for Impacts of Dredging on Existing Shoreline Structures,</b> Rakam Lama Tamang, Michael Byle, Vinay Singhal, Senda Ozkan  <b>Deterministic and Probabilistic Rock Plane Slope Stability Analysis,</b> Jiliang Li, Thiago Leao, Jinyuan Zhai  <b>Current Status of GeoRisk Education in Japan,</b> Natsuki Doi, Takayuki Shuku  <b>Exploration and Practice of Case-Based Teaching for Geotechnical Reliability Analysis,</b> Xiaohui Tan, Xiaoliang Hou, Haichun Ma, Zhitang Lu  <b>Developing Mixed Reality Game for Enhanced Learning of Geotechnical Experiments and Geotechnical Design,</b> Chenchen Huang, Luobin Cui, Cheng Zhu, Ying Tang</p>	<p><b>Effect of Learning Function on Reliability Analysis of Geotechnical Engineering Systems Using Adaptive Bayesian Compressive Sensing and Monte Carlo Simulation,</b> Peiping Li, Yu Wang  <b>Bayesian Dynamic Evaluation of Service Life of Lining Segments under Chloride Ion Erosion,</b> Xianda Feng, Kehang Xing, Jimenez Rafael  <b>Calibration of Highly Computationally Intensive Propagation Models of Flow-like Natural Hazards,</b> Colette Buchs, Jocelyn Minini  <b>A Simplified Method of Incorporating Testing Data and Monitored Behaviour for Predicting Surface Settlement Using Bayesian Back Analysis,</b> Merrick Jones, Shan Huang, Jinsong Huang  <b>Quantifying Life Loss of Asphalt Concrete Core Dam Break Based on Bayesian Network,</b> Lin Wang, Sangpeng Wang  <b>Sequential Bayesian Updating of Spatially Varying Soil Parameters and Probability of Failure Caused by Rainfall Using Slope Performance Records,</b> Min Pan, Shui-Hua Jiang, Xin Liu, Gu-Quan Song  <b>Dealing with Uncertainties in Detecting and Characterizing Quick Clay in Norway,</b> Iason Papaioannou, Thi Minh Hue Le, Anteneh Tsegaya, Jean-Sebastien L'Heureux  <b>Comparison of Gaussian and Indicator based Sequential Simulation Methods for 3D Spatial Uncertainty Quantification in Subsoil Modeling Using Cone Penetration Tests,</b> Andreas Witty, Andres Pena Olarte, Roberto Cudmani  <b>Benchmarking 3D Subsurface Models from Bayesian Compressive Sampling Using Real Data,</b> Borui Lyu, Yu Wang</p>



1:30 – 3:00 p.m. <b>Technical Sessions</b>			
Track A   Washington Ballroom	Track B   Salon C	Track C   Wilson/Harrison	Track D   Salon AB
<p><b>Geological and Ground Model Uncertainties</b>  <b>Moderators:</b> Xiaohui Qi, Tengyuan Zhao, Hsein Juang</p>	<p><b>Data-Driven and Probabilistic Site Characterization - II</b>  <b>Moderators:</b> Yu Wang and Xiaohui Qi</p>	<p><b>Advances in Computational Methods for Geotechnical Uncertainty Quantification, Modeling and Risk Assessment</b>  <b>Moderators:</b> Te Xiao and Jianye Ching</p>	
<p><b>Probabilistic Assessment of Soil Liquefaction Potential Using CPT-Based Smart Site Investigation Strategy,</b> Zheng Guan, Yu Wang</p> <p><b>A Method for Probabilistic Assessment of Slope Bearing Capacity of Slopes Considering Stratigraphic Uncertainty,</b> Hui Wang, Zehang Qian</p> <p><b>The Effect of Joint Spacing Uncertainty on the Landslide Debris Accumulation Features — Insights from a Sedimentary Dip Slope Case,</b> Yu-Han Cheng, Chih-Chen Yeh, Chih-Hsiang Yeh, Wen-Chao Huang</p> <p><b>Prediction of Multiple Interfaces of Geological Layers Using a Generalized Linear Model,</b> Xiaohui Qi</p> <p><b>Characterization of Geotechnical Model Uncertainties Using a Non-Invasive Geophysical Approach,</b> Muhammad Hasan, Yanjun Shang</p> <p><b>Self-Checking the Reliability of Engineering Geological Models,</b> Antonio Dematteis, Wayne Barnett, Trevor Carter</p> <p><b>The LiDAR-Based 3D Stratigraphic Model Calibrated with Limited Borehole Data,</b> Chih-Hsiang Yeh, Yu-Chen Lu, Hsein Juang, Jia-Jyun Dong</p> <p><b>Stratigraphic Uncertainty Reduction Considering the Location of Additional Borehole,</b> Wan-Ying Chien, Bo-Sheng Ciou, Yu-Chen Lu, Chih-Hsiang Yeh, Wen-Yi Hung</p>	<p><b>Data-driven Site Characterization Based on a Markov Random Field Model,</b> Takayuki Shuku</p> <p><b>Optimization of 3D Borehole Layout Strategy Considering Stratigraphic Uncertainty,</b> Wei Yan, Wan-Huan Zhou, Ping Shen</p> <p><b>Estimation of Spatial Distribution Considering Indirect Data Using Gaussian Process Regression,</b> Yuta Tsuda, Yukihisa Tomizawa, Ikumasa Yoshida, Yu Otake</p> <p><b>Efficient Simulation of 2D Non-Stationary CPT Profiles from Incomplete Dataset Using Machine Learning Methods,</b> Tengyuan Zhao, Yu Wang</p> <p><b>Inferring Semi-parametric Gaussian Process Model Parameters for Missing Geotechnical Data Prediction,</b> Jiawei Xi, Jinsong Huang, Yuting Zhang</p> <p><b>The Effect of Posterior Distribution Sampling Schemes on Probabilistic Dynamic CPTu Rate-Effect Corrections,</b> Stefano Collico, Marcos Arroyo</p> <p><b>Inferring Spatial Variation of Soil Classification by Both CPT and Borehole Data,</b> Hassan Kamyab, Jianye Ching</p> <p><b>A New Performance Metric for 2D/3D Data-driven Site Characterization Methods,</b> Takayuki Shuku</p>	<p><b>An Integrated Probabilistic Method to Evaluate Building Vulnerability upon Landslide Impacts,</b> Sun Xiaoping, Peng Zeng, Tianbin Li</p> <p><b>Quantile-Based First-Order Second-Moment Method for Efficient Slope Reliability Analysis,</b> Chengchuan Yin, Zhiyong Yang, Te Xiao, Xueyou Li</p> <p><b>Enhancing Failure Probability Estimation for a Site-Specific Slope by Considering Its Survival Records from Past Rainfall Events,</b> Liu Xin, Yu Wang</p> <p><b>Estimation of Limit State Probabilities of Consolidation Settlement by Adaptive Gaussian Process Regression and Importance Sampling,</b> Tomoka Nakamura, Ikumasa Yoshida, Yu Otake</p> <p><b>Reducing Uncertainty and Risk of a Dam by Site Investigation, Quantitative Analysis, Model Calibration, and Observational Method,</b> Dan Ding, Andrew Boeckmann, Paul Axtell, Eric Loehr</p> <p><b>3D City-Scale Marine Geological Model for Hong Kong,</b> Haifeng Zou, Xiao Te, Yifei Zhang, Yuebin Liu, Limin Zhang</p> <p><b>A GIS-Based Tool for Probabilistic Physical Modelling and Prediction of Landslides: Improved GIS-FORM Landslide Prediction,</b> Jian Ji, Hongzhi Cui</p> <p><b>Probabilistic Analysis of a Nailed Wall Considering Excavation Stages,</b> Shengfeng Huang, Pooya Dastpak, Sina Javankhoshdel, Daniel Dias, Rita Sousa</p>	
<p>3:15 – 5:00 p.m. <b>Afternoon Plenary Session   Salon AB</b>  <b>Moderators:</b>  <b>ASCE Award Winning Keynotes</b>  <b>2021 J. James R. Croes Medal:</b> Chen, J., Gilbert, R. B., Ku, A., Chen, J. Y., &amp; Marshall, P. W. (2020). Calibration of Model Uncertainties for Fixed Steel Offshore Platforms Based on Observed Performance in Gulf of Mexico Hurricanes.  <b>2021 Thomas A. Middlebrooks Award:</b> Bathurst, R. J., Allen, T. M., Lin, P., &amp; Bozorgzadeh, N. (2019). LRFD Calibration of Internal Limit States for Geogrid MSE Walls.  <b>2023 J. James R. Croes Medal: A.,</b> Probabilistic Structural System Response to Differential Settlement Resulting from Spatially Variable Soil, Stuedline, A., Huffman, J., Barbosa, A., and Belejo,  <b>2023 Arthur Casagrande Professional Development Award:</b> Bryant Robbins</p> <p><b>Questions and Answers</b></p>			