

## 4th International Symposium on Machine Learning & Big Data in Geoscience

### Theme

Data-centric solutions for  
reshaping the next generation  
geo-industries

### Hosts

This symposium is Hosted by ISSMGE  
Technical Committee of Machine Learning  
and Big Data (TC309)

Organized by University College Cork, Ireland



29<sup>th</sup> August - 1<sup>st</sup> September 2023



University College Cork, Ireland



[www.ismlg2023.com](http://www.ismlg2023.com)

### Who Should Attend

A number of stakeholders should attend, including:

- Geotechnical/Geological engineers
- Geologists
- Geoscientists
- Geotechnical Asset Owners
- Geoheritage Owners
- Civil engineers
- Data analyst
- Infrastructure stakeholders

### Topics

- Development of benchmark datasets for geoscience and geo-industries
- Development and application of innovative geotechnical monitoring technologies to subsurface engineering and geoscience
- Gathering and processing of big data and metadata in geoscience and geoengineering
- Big geodata mining, generation of big geodata by computational methods and etc.
- Development and optimisation of machine learning algorithm for geoscience and geotechnics
- Applying artificial intelligence to site investigation and geo-materials behaviour
- Application of machine learning and data analytics for design, construction, maintenance of geotechnical assets during the whole-life cycle
- Role of visual data analytics, virtual reality and data-centric technology in geosciences and beyond



For General Queries Please Email - [ismlg2023@abbey.ie](mailto:ismlg2023@abbey.ie)  
For Scientific Programme Queries Please Email - [ismlg2023@gmail.com](mailto:ismlg2023@gmail.com)



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# ISMLG 2023

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### Call for Special Sessions (13 Special session proposals already accepted)

In this symposium, a special session can address a particular theme (e.g., novel monitoring tool, data analytics) or consist of work done in some particular international projects.

Each organized session should have a minimum of 6 papers. limited to no more than 3 organizers. A one-page short proposal for a special session would suffice.

### Scientific committee

- Dr. Lars Andresen, Norwegian Geotechnical Institute
- Prof. Renpeng Chen, Hunan University
- Prof. Xiangsheng Chen, Shenzhen University
- Prof. Yunmin Chen, Zhejiang University
- Dr. Yajun Fang, Massachusetts Institute of Technology
- Prof. Steffen Freitag, Karlsruhe Institute of Technology
- Prof. Kenneth Gavin, TU Delft
- Prof. Chuan He, Southwest Jiaotong University
- Prof. Hongwei Huang, Tongji University
- Prof. Xian Liu, Tongji University
- Dr. Zhongqiang Liu, Norwegian Geotechnical Institute
- Prof. Thomas Marcher, Graz University of Technology (TU Graz)
- Prof. Guenther Meschke, Ruhr-Universität Bochum
- Prof. Mike Mooney, Colorado School of Mines
- Prof. Mohammad Rezanian, University of Warwick
- Dr. Jennifer Schooling, University of Cambridge
- Prof. Isam Shahrouh, Université des Sciences et Technologies de Lille (Lille-1)
- Prof. Kenichi Soga, University of California, Berkeley
- Prof. Giulia MB Viggiani, University of Cambridge
- Prof. Jianfeng Jeff Wang, The City University of Hong Kong
- Prof. Shuying Wang, Central South University
- Prof. Yu Wang, City University of Hong Kong
- Prof. Andrew Wheeler, University College Cork
- Prof. Zhenyu Yin, The Hong Kong Polytechnic University
- Prof. Dimitrios Zekkos, University of California, Berkeley
- Prof. Dongmei Zhang, Tongji University
- Prof. Dongming Zhang, Tongji University
- Prof. Qianbing Zhang, Monash University
- Prof. Zixin Zhang, Tongji University
- Prof. Hannah Zhou, University of Macau
- Prof. Hussein Mroueh, Université de Lille
- Prof. Hehua Zhu, Tongji University
- Prof. Honghu Zhu, Nanjing University
- Prof. Asaad Faramarzi, University of Birmingham

### The local organizing committee

- Dr. Zili Li (Chair organiser)
- Dr. Mike Long
- Dr. Shane Donohue
- Dr. David Igoe
- Dr. Budi Zhao

### Due Dates

- Special session proposal : **October 15<sup>th</sup> 2022**
- Two-page abstract submission : **December 1<sup>st</sup> 2022**
- Notification of acceptance : **January 15<sup>th</sup> 2023**

### Registration Fees

| Registration Categories |           |
|-------------------------|-----------|
| Early Bird Full Fee     | € 500     |
| Full Fee                | € 580     |
| Student Early Bird Fee  | € 300     |
| Student Full Fee        | € 380     |
| Social Functions        |           |
| Banquet Tickets         | € 80      |
| Technical Tours         | Price TBC |

- A Conference Proceeding of the extended abstracts will be provided
- Special Issue – Selected abstracts will be recommended to special issues in high-quality journals (e.g., Tunnelling and Underground Space Technology, Underground Space and etc.)

