

## Special Issue

# Artificial Intelligence Monitoring and Early Warning in Rock Engineering

### Message from the Guest Editors

Rock engineering plays an important role in the development of human society. Due to the complexity of engineering geological conditions, some disasters will inevitably occur during the construction process, such as landslide, large deformation and rock collapse. One of the important reasons lies in the unreliability of data collection and analysis, which makes the workers unable to grasp the spatial and temporal evolution information of disasters in time. Therefore, it is of great significance to study high-precision disaster monitoring technologies and intelligent early-warning approaches. This Special Issue welcomes papers on the state-of-the-art applications of AI in the monitoring and early warning of rock engineering. The key areas include, but are not limited to:

- Advanced intelligent monitoring technology in rock engineering;
- AI in rock fracture signal monitoring;
- Machine vision in rock deformation monitoring;
- AI-based dynamic disaster risk assessment;
- Intelligent diagnosis of disaster precursory information;
- Time series prediction of monitoring data;
- Big data in managing disaster information;
- Early warning methods based on multi-source data.

### Guest Editors

Dr. Weizhang Liang

Prof. Dr. Kang Peng

Dr. Ju Ma

Dr. Hao Wu

### Deadline for manuscript submissions

closed (20 August 2024)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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