Machine Learning Modeling for Spatial-Temporal Prediction of Geohazard

Guest Editors:

Dr. Junwei Ma
Badong National Observation and Research Station of Geohazards (BNORSG), China University of Geosciences, Wuhan, China

Prof. Dr. Jie Dou
Badong National Observation and Research Station of Geohazards, China University of Geosciences, Wuhan 430074, China

Deadline for manuscript submissions:
closed (10 April 2023)

Message from the Guest Editors

Geohazards, such as landslides, rock avalanches, debris flow, ground fissures, and ground subsidence, pose significant threats to life and property. Recently, machine learning (ML) has become the predominant approach in geohazard modeling due to its advantages of providing excellent generalization ability and accurately describing complex and nonlinear behavior.

However, the use of advanced algorithms in deep learning is still poorly understood in this field. Further, there are fundamental challenges associated with ML modeling, including input variable selection, uncertainty quantification, and hyperparameter tuning.

This Special Issue will provide a forum for original research work exploring new frontiers and challenges for the applications of ML for spatial-temporal modeling of geohazards. Moreover, innovative methods and original applications would be appropriate.

The topics of interest include but are not limited to:

- Geohazard modeling;
- Spatial–temporal prediction;
- Machine learning;
- Deep and reinforcement learning;
- Metaheuristic optimized machine learning approach;
- Physics-based and data-driven hybrid modeling.

Special Issue

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

Author Benefits

Open Access : free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

Contact Us