Special Issue

Machine Learning Modeling for Spatial-Temporal Prediction of Geohazard

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.

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Deadline for manuscript submissions

closed (10 April 2023)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/102202

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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.

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