Special Issue

Landslide Detection Using Machine and Deep Learning

Message from the Guest Editor

Due to global warming, extreme weather events are becoming more frequent, increasing landslide risks. Traditional landslide detection methods have limitations in scalability and accuracy. Machine learning (ML) and deep learning (DL) offer improved solutions by analyzing remote sensing data, elevation models, and sensor networks, enhancing early warning systems and disaster response. This Special Issue aims to compile studies that explore applications of machine learning and deep learning to facilitate landslide forecasting, monitoring and detection. This Special Issue welcomes original research articles and comprehensive reviews on the application of ML and DL techniques for landslide detection and prediction. Topics of interest include, but are not limited to, the following:

- Landslide susceptibility mapping;
- Time series analysis for landslide forecasting;
- Remote sensing and image-based landslide detection;
- The integration of multi-source data (e.g., meteorological, geological, hydrological);
- Explainable AI and model interpretability in landslide studies;
- Real-time landslide monitoring with sensor and IoT data.

Guest Editor

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Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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