Special Issue

Machine Learning Models for Flood Hazard Assessment

Message from the Guest Editor

Machine learning (ML) models have emerged as valuable tools for flood hazard assessment, offering improved predictive capabilities and data-driven insights. Current state-of-the-art techniques include supervised learning algorithms, such as random forests and support vector machines, as well as advanced deep learning approaches like convolutional neural networks (CNNs) and recurrent neural networks (RNNs). These models leverage large datasets, including meteorological, hydrological, and geographic information, to enhance flood risk predictions and enable real-time monitoring. Despite their potential, several challenges remain.

Guest Editor

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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