Special Issue

Application of Machine Learning in Urban Water Management: Recent Advances and Prospects

Message from the Guest Editors

Machine learning is an important tool which enjoys widespread usage urban water management. Neural networks, support vector machines, cluster analysis techniques and other methods have been successfully applied in predictions of urban water consumption, detection and location of bursts and leaks, bust risk evaluation of pipes, and identification of contamination accidents. However, on the other hand, the application of these machine learning methods still has great limitations, especially for urban water supply pipe networks and drainage pipe networks with complex structure and operation status. These methods show different degrees of shortcomings in applicability and accuracy, and cannot form all-weather online technical applications. The objective of this Special Issue is to compile the latest advances in the application of machine learning in urban water management, including new research methods, successful application cases, reviews and analyses on this topic, etc., so as to provide a reference for researchers and engineers in this field.

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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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