Special Issue

Machine Learning in Water Distribution Systems and Sewage Systems

Message from the Guest Editors

Currently, water distribution and wastewater systems are very often equipped with measuring devices with the ability to transmit data to a central management center. This allows for the collection of many parameters, which, when properly used, can allow for the improvement in processes in the planning, design, and operation of water distribution and sewage systems. In the analysis of the functioning of systems, data obtained as a result of computer simulations are often used. The purpose of this Special Issue is to propose machine learning (ML) models to improve the various types of processes in water distribution and wastewater systems that occur during the planning, design, and operation stages. A special release may include supervised learning algorithms, unsupervised learning algorithms, and reinforcement learning algorithms, such as the following:

- Deep learning models;
- Decision tree;
- Fuzzy inference;
- SVM (Support Vector Machine) algorithm;
- Evolutionary computation;
- Naive Bayes algorithm;
- KNN algorithm;
- K-means;
- Random forest algorithm;
- Dimensionality reduction algorithms;
- Logistic Regression;
- PCA (Principal Component Analysis) algorithm.

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Message from the Editor-in-Chief

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.

Editor-in-Chief

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