



an Open Access Journal by MDPI

# Applications of Artificial Intelligence (AI) in Water Resources Systems

Guest Editor:

### Prof. Dr. Avi Ostfeld

Faculty of Civil and Environmental Engineering, Technion, Haifa 32000, Israel

Deadline for manuscript submissions: **20 March 2025** 

### Message from the Guest Editor

Dear Colleagues,

Artificial Intelligence revolutionizes water resource by enhancing predictive capabilities, management and improving optimizing usage, decision-making processes. In this Special Issue, titled "Applications of Artificial Intelligence (AI) in Water Resources Systems", machine learning algorithms will be explored in their ability to forecast water demand, detect anomalies in water resource system performance, and model hydrological cycles with unprecedented accuracy. AI-driven tools enable real-time monitoring and adaptive management of water systems, facilitating sustainable practices and resilience against climate variability. This collection highlights innovative applications demonstrating Al's potential to transform water resource management, addressing challenges from urban planning to agricultural efficiency and beyond.

Prof. Dr. Avi Ostfeld *Guest Editor* 



mdpi.com/si/213258







an Open Access Journal by MDPI

### **Editor-in-Chief**

#### Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

### 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 scientific domains and and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Water Resources*) / CiteScore - Q1 (Water Science and Technology)

## **Contact Us**

*Water* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/water water@mdpi.com X@Water\_MDPI