Making Water Smart

This chapters in this book highlight the breadth of smart water technologies and applications. From the use of classical machine learning and data transformation methods for process improvement, to data management and assimilation in models for better monitoring control, a selection of these chapters describes the acquisition and preparation of data as an initial step in its use as part of a digital framework for smart water applications. Importantly, several chapters examine the use of smart tools and contemporary AI technologies, such as neural networks and Internet of Things, that demonstrate value in non-conventional or remote environments. This collection demonstrates the innovation possible through the entire 'pipeline' of the process of applying smart water techniques, from data measurement and collection, through initial analysis to the application of machine learning and AI techniques and finally through to system deployment. Each of these steps plays an important role in the application of data science and AI techniques to water problems.

Collectively, the book showcases the innovation required to leverage modern data science and AI approaches in the water sector and collectively point the way towards a future of new measurement techniques, innovative methodologies, and intuitive human interaction to truly 'Make Water Smart'.

In Focus – a book series that showcases the latest accomplishments in water research. Each book focuses on a specialist area with papers from top experts in the field. It aims to be a vehicle for in-depth understanding and inspire further conversations in the sector.

Publication Date: 15/10/2021
ISBN13: 9781789062816
Pages: 296

Print:
Standard price: £125 / €156 / $188
Member price: £94 / €117 / $141