



an Open Access Journal by MDPI

# Digital Twins and Extended Reality: Opportunities and Challenges of Integrated Applications

Guest Editors:

#### Dr. Daniela Oreni

Politecnico di Milano, Milan, Italy

#### Dr. Fabrizio Banfi

Co-Scientific Director of ABCLab Glcarus Surveying and Modelling, Politecnico di Milano, 31 20133 Milan, Italy

#### Dr. Davide Mezzino

International Telematic University UniNettuno, Rome, Italy

Deadline for manuscript submissions: closed (20 April 2024)



mdpi.com/si/152636

## **Message from the Guest Editors**

Dear Colleagues,

The architecture, engineering and construction (AEC) industry and the digital heritage domain are both benefiting from the augmented reality (AR) and virtual reality (VR) revolutions. Architectural representation, along with advanced tools and techniques of digital visualization, enables users to increase the informative value of digital models.

Researchers and architects are increasingly capable of devising complex scenarios, characterised by buildings of high historical-cultural value, along with historical and modern infrastructure, archaeological sites, and museums, and have directed their resources towards innovative processes such as scan-to-BIM, BIM projects, HBIM projects, BIM-to-FEA, CoSim, BEM, InfraBIM, able to digitise and transform simple point clouds (3D survey data) into informative digital models.

Consequently, we invite the submission of articles dealing with innovative approaches and new perspectives, as well as practical applications, addressed to a broad range of professionals working in the fields of documentation, surveying, representation, digitisation, visualisation, interpretation and simulation of complex scenarios.







an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Diego González-Aguilera

Cartographic and Land Engineering Department, Higher Polytechnic School of Avila, University of Salamanca, Hornos Caleros, 50, 05003 Avila, Spain

### Message from the Editor-in-Chief

*Drones* is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.

There is a need for high quality papers in this area and the *Drones* Editorial Board are widely recognized international leaders. *Drones* journal guarantees a serious peer review and a rapid publication across the whole discipline of drones.

## **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), Inspec,

and other databases.

Journal Rank: JCR - Q2 (Remote Sensing) / CiteScore - Q1 (Aerospace Engineering)

## **Contact Us**

*Drones* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/drones drones@mdpi.com X@Drones\_MDPI