electronics

an Open Access Journal by MDPI

IMPACT FACTOR 2.9

CITESCORE 4.7

# Validation & Verification of Intelligent Systems: The Case of Digital Twins

Guest Editors:

**Dr. Philipp Zech**
Quality Engineering, Department of Computer Science, University of Innsbruck, 6020 Innsbruck, Austria

**Dr. Clemens Sauerwein**
Quality Engineering, Department of Computer Science, University of Innsbruck, 6020 Innsbruck, Austria

**Dr. Luca Davoli**
Department of Engineering and Architecture, University of Parma, 43124 Parma, Italy

Deadline for manuscript submissions:
**15 August 2024**

## Message from the Guest Editors

In intelligent systems, the code written is traditionally responsible for developing the program that solves the problem. Consequently, testing the resulting systems becomes intractable due to lacking requirements, associated specifications, and eventually insight into how the solution was established and thus exposes specific—and in the worst case erroneous—behavior. Digital twins offer the potential to replicate internal system processes and behaviors by recreating the conditions as they happen and thus provide tractability. Near real-time data can be sequenced, and the system under test can be tested with production data and production triggers.

Any failure that happens in production can be simulated in the digital twin, thus significantly improving application testing accuracy. The goal of this Special Issue is to revise the verification and validation of intelligent systems with a special focus on the benefits delivered by the digital twin.

mdpi.com/si/154723

Special Issue

# electronics

IMPACT FACTOR 2.9

CITESCORE 4.7

an Open Access Journal by MDPI


## Editor-in-Chief


**Prof. Dr. Flavio Canavero**
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy


## Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

## 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), CAPlus / SciFinder, Inspec, and other databases.
**Journal Rank:** JCR - Q2(*Electrical and Electronic Engineering*) CiteScore - Q2 (*Electrical and Electronic Engineering*)

## Contact Us


*Electronics* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
𝕏@electronicsMDPI