Special Issue

Advanced Internet of Things Ecosystems: Architectures, Intelligence, and Communication Innovations

Message from the Guest Editors

This Special Issue aims to bring together academia and industrial researchers to propose new IoT architectures, intelligence integration, and novel communication strategies that will shape the future of IoT ecosystems. This Special Issue will publish high-quality, original research papers. The potential topics of interest include, but are not limited to, the following:

- Cloud/edge–IoT continuum architectures;
- IoT data management and advanced IoT analytics;
- IoT applications and services;
- Industry 4.0 and the industrial IoT (IIoT);
- Advances in IoT protocols;
- Next-generation infrastructure for the IoT;
- IoT 5G/6G slice management;
- IoT orchestration;
- Future network architectures and protocols for the IoT;
- Edge AI, embedded AI, and cooperative intelligence for the IoT;
- Generative AI (GenAI) use cases for the IoT;
- Dataspaces in IoT applications;
- Green communication and the IoT;
- Visible light communications for the IoT;
- Ambient intelligence;
- Case studies of implementation in IoT Ecosystems.

Guest Editors

Dr. David Sarabia-Jácome
i2CAT Internet Research Center, 08034 Barcelona, Spain

Prof. Dr. Carlos Enrique Palau Salvador
Communications Department, Universitat Politècnica de València, 46022 Valencia, Spain

Deadline for manuscript submissions

20 October 2025

Applied Sciences

mdpi.com/si/236947

mdpi.com/journal/
applsci

Applied Sciences

mdpi.com/journal/applsci

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:
JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)