

Special Issue

Next-Generation of Internet of Things (IoT): New Advances, Solutions, Applications, Services and Challenges

Message from the Guest Editors

The next generation of IoT is emerging based on the convergence of key enablers such as Artificial Intelligence (IA), blockchain, edge computing, and 5G/6G networks. The IoT evolution is characterized by innovative and secure applications with embedded intelligence at the edge that relies on reliable and ultra-low latency connectivity, processing capabilities at the network's edge, real-time data processing, and predictive analytics. The next generation of IoT networks is expected to support a growing number of Intelligent IoT devices and tactile Internet solutions to provide real-time applications. New architectures and protocols are required to facilitate the large-scale deployment of IoT devices and manage network resources. These new solutions rely on the Software Defined-Networking (SDN), Network Function Virtualization (NFV), and Edge-Fog-Cloud Continuum concepts to support scalable IoT applications. This Special Issue aims to bring together academia and industrial researchers to propose new IoT architectures and present innovative solutions, applications, and services for addressing the next generation of IoT challenges.

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 March 2025



Applied Sciences

an Open Access Journal
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CiteScore 5.3



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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

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