



Intelligent Systems, Communications, and Networks for the Next-Generation Internet of Things

Guest Editors:

Dr. Nhu-Ngoc Dao

Department of Computer Science
and Engineering, Sejong
University, Seoul 05006, Korea

Prof. Dr. Sungrae Cho

School of Computer Science and
Engineering, Chung-Ang
University, Seoul 06974, Korea

Deadline for manuscript
submissions:

closed (31 January 2024)

Message from the Guest Editors

Dear Colleagues,

The world has recently witnessed significant success in the Internet of Things (IoT) paradigm, where the problem of communication and resource constraints have been addressed to provide IoT devices and services with Internet connectivity. For the next-generation IoT, enabling the intelligence in IoT systems, communications, and networks is expected to efficiently accelerate and popularize the utilization of IoT technology in our daily life activities. In particular, the macro shift of computing capability from the cloud to the edge allows various machine-learning algorithms to be appropriately deployed in the proximity of IoT devices such as federated learning, split learning, and early exiting models. Despite the potential of the mentioned approaches, optimizing operation processes and resource utilization is challenging to improve the effectiveness and performance of such intelligent IoT systems. Hence, comprehensively theoretical and mathematical analyses as well as experimental verifications are necessary to mature the development and implementation of machine-learning approaches in the next-generation IoT.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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), RePEc, and other databases.

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)