

# Special Issue

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

### Message from the Guest Editors

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.

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### Deadline for manuscript submissions

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# Mathematics

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