

IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on “Consumer Electronics in The Era of The Internet of Everything (IoE) And Massive Data”

Theme:

With the development of technologies such as 5G, Internet of Things, artificial intelligence, and big data, human society is entering the era of Internet of Everything (IoE) and massive data. The fundamental purpose of technological innovation is to meet the needs of production and life in human society, so consumer electronics technology is most closely related to people's lives. Studying the development of new consumer electronic products and technologies in the context of the Internet of Everything and massive data can accelerate the pace of development and application of emerging technologies in the era of the Internet of Everything and massive data.

However, to enter the era of the Internet of Everything, we still face many technical challenges. For example, the Internet of Everything is essentially a connection between different sensor terminals. In the era of the Internet of Everything, countless terminal devices will be connected to each other. How to efficiently and stably process massive interactive information and ensure the security of the network and private data in the era of the Internet of Everything are two important issues. In addition, the interconnection of all things will inevitably lead to the formation of massive data. How to fully tap the potential value of data is an important issue in the era of Internet of Everything and massive data. For example, the continuous improvement of consumer electronics-related technologies, such as autonomous driving, can be facilitated by using artificial intelligence techniques to learn from data. For another example, the development trend of consumer electronics products can be mined through massive data, thereby providing guidance on the development direction of the Internet of Everything-related technologies.

This special issue will be titled "Consumer Electronics in The Era of The Internet of Everything (IoE) And Massive Data". Focus on the research on consumer electronics and related technologies in the era of the Internet of Everything and massive data, so as to provide guidance for the rapid development of the Internet of Everything.

Topics of interest in this Special Section include (but are not limited to):

- Research on Internet of Things technology for consumer electronics in the era of Internet of Everything.
- In the era of the Internet of Everything, technical research in dealing with massive data interaction and large-scale collaboration.
- Combined with the background of the Internet of Everything, explore the application of federated learning technology in the field of consumer electronics.
- Mass data and artificial intelligence technology are combined in research in the field of consumer electronics, such as recommendation, pattern recognition, etc.
- Research on network security and information privacy of consumer electronic products in the era of Internet of Everything.
- Research on basic equipment such as new sensors and microcontrollers in the era of the Internet of Everything.
- Research on new consumer electronic products in the era of Internet of Everything and massive data. Such as Autonomous Driving, VR, Metaverse, Remote Smart Medical Treatment, etc.
- Research on the future trend of consumer electronics industry in the era of Internet of Everything and massive data

Important dates:

- End of submission of Manuscripts: March 1, 2023
- Expected publication date (tentative): September 2023

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Instructions for authors:

Manuscripts should be prepared following guidelines at: <https://ctsoc.ieee.org/publications/ieee-transactions-on-consumer-electronics.html> and must be submitted online following the IEEE Transactions on Consumer Electronics instructions: <https://ctsoc.ieee.org/publications/ieee-transactions-on-consumer-electronics.html>. During submission, the Special Section on **"Consumer Electronics in The Era of The Internet of Everything (IoE) And Massive Data"** should be selected.