

IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on "Artificial Intelligence-empowered Internet of Things for Human-Centric Consumer Applications"

Theme:

Human-centric consumer applications play a critical role in facilitating intelligent environments by improving quality of life, creating new markets, creating new products, and creating new industry paradigms. However, the increasing number of heterogeneous Internet of Things (IoT), sensors, cloud, and edge services bring about several traditional research problems and new innovative research questions related to human-centric consumer electronics. One of the key enablers for human-centric consumer applications is the Internet of Things (IoT), which can exploit state-of-the-art communication technologies to support advanced services. However, IoT devices and management systems are typically manufactured by multiple vendors with multiple processes and standards. Recently, Artificial Intelligence (AI) has recently emerged as a powerful weapon that supports very implement efficient data analysis and making accurate decisions on service provisions of various kinds. Combining IoT with advanced AI technology can greatly benefit consumer electronics.

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

- Intelligent mental assessment systems
- IoT system architectures in consumer electronics
- Explainable AI for human-centric consumer applications
- Intelligent communications for consumer electronics
- Smart sensing for human-centric consumer applications
- Signal processing for human-centric consumer applications
- Real-time analysis for human-centric consumer applications
- Embedded technologies for intelligent consumer electronics
- Security, trust, and privacy computing for consumer electronics
- · Design and framework of human-centric consumer applications
- Real-world applications of Al and IoT for consumer electronics

Important dates:

- End of submission of Manuscripts: March 15, 2023
- Expected publication date (tentative): September 2023

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