IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on “Security and Privacy of Multimedia and Multimodal Data for Consumers Electronic Applications”

Theme:

With the development of multimedia applications, consumer electronics such as heart-rate monitors, personal computers, digital cameras, tablets, Amazon Alexa, smart watches and phones, video games, and entertainment and navigation systems etc. that use multimedia data in the form of images, text, audio, video, and graphics are becoming more popular and powerful with the availability of creating, embedding, encoding and decoding tools. Further, multimedia data and more generally, multimodal data can be frequently used by the professionals to offer a great opportunity in various potential applications. However, this has serious security implications in several application domains. Additionally, various actions including unlawful alteration, unauthorized distribution, copyright violation, and misuse of sensitive and private multimedia data is growing each day producing negative impacts on the accuracy, efficiency, safety and economics of multimodal data systems. Further, various theories, techniques, and best practices developed by the community for handling multimedia data can provide useful inspirations or generalizable to multimodality data including but not limited to multimedia. The advent of the Internet of Things (IoT), cyber-physical systems (CPSs), robotics, as well as personal and wearable devices provides many opportunities for the multimedia community to develop synergies. Therefore, addressing these challenges has been an interesting problem for different research community.

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

- Multimedia security and forensics for consumer electronics
- Security protocols and standards for consumer multimedia
- Cryptographic protocols and cipher for the multimedia
- Applications of secure multimedia and multimodal
- Multimedia in blockchain
- Stealth communication, information hiding, and their detection for consumer electronics applications
- Secure multimedia and multimodal data in machine learning/deep learning environments
- Multimedia hashing
- Securing multimedia in cloud, fog and edge computing environment
- Content protection for mobile consumer multimedia applications
- Protection of multimedia data in distribution and storage
- Biometric for consumer multimedia

Important dates:

- End of submission of Manuscripts: August 30, 2023
- Expected publication date (tentative): April 2024

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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 “Security and Privacy of Multimedia and Multimodal Data for Consumers Electronic Applications” should be selected.

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