IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on "Next-Generation Imaging Technology for Consumer Electronics"

Theme:

A variety of applications using miniaturized optical lenses can be found among rapidly evolving technologies. From smartphones and cameras in our daily life to augmented and virtual reality glasses for the recent trends of the untact era, miniaturization of optical lenses permits the development of many types of compact and consumer devices. The miniaturized imaging devices are expected to be an essential foundation for next generation imaging techniques.

The next generation of imaging technology could be right around the corner led by a single optical fiber that is about the width of a human hair. Imaging technique that can create video images via a single multimode optical fiber. It also employs time-of-flight 3D imaging, which touts applications such as environmental monitoring and motion tracking. Communication exchanges between light modes typically scramble any light shining through a single optical fiber when imaging, rendering the image unrecognizable.

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

- Advanced Imaging Technologies for Consumer products identification,
- Image Processing for Consumer classification and tracking,
- Next-Generation Imaging with optimization techniques for Consumer Electronics,
- Data collection and storage with respect to IoT environments for Consumer Applications,
- Image recognition, Object detection and tracking, Object classification,
- Image Retrieval, Image search for Intelligent transportation systems,
- Augmented reality,
- Video surveillance monitoring systems.

Important dates:

- End of submission of Manuscripts: January 31, 2024
- Expected publication date (tentative): 4th quarter 2024

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Instructions for authors:

Manuscripts should be prepared following guidelines at: https://ctsoc.ieee.org/publications/ieee-transactions-onconsumer-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 "Next-Generation Imaging Technology for Consumer Electronics" should be selected.