

## IEEE Transactions on Consumer Electronics

### Call for Papers

### Special Section on Consumer Electronics with Artificial Intelligence – Part I

Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL) represent game changer technologies for Consumer Electronics (CE). In fact, they ever more represent the core of most CE products, and they are also changing the way these products are designed and engineered. As a matter of example, on the one side, AI, ML and DL support the most advanced audio/video systems and their embedded signal processing functionalities, or enable the necessary information handling required in any smart environment powered by Internet of Thing (IoT) and edge computing paradigms. On the other hand, modern solutions for security and privacy, automotive and next-generation vehicles, or entertainment, among others, strongly rely on AI, ML and DL since from their early conception and, afterwards, in any development step. Therefore, this Special Section of the IEEE Transactions on Consumer Electronics (TCE) will focus on innovative methods that have successfully showed the benefits of exploiting AI, ML, and DL with CE systems throughout their entire lifecycle.

Topics of interest in this Special Section include (but are not limited to) AI, ML, and DL technologies used in designing, developing, and powering state-of-the-art:

- Audio/video systems and signal processing solutions
- CE for automotive and next-generation vehicles
- Consumer systems for healthcare and wellbeing
- IoT, Internet of Everywhere, edge computing and smart environments
- Quantum-supported CE
- Security and privacy mechanisms for hardware and software CE systems
- Extended reality (VR/AR/MR), HMI, entertainment and gaming

#### Important dates

- Submission of Manuscripts: 15 SEPTEMBER 2022
- Notification to Authors (1st Revision): 15 NOVEMBER 2022
- Submission of Revised Manuscripts: 15 DECEMBER 2022
- Notification to Authors (2nd Revision): 15 JANUARY 2023
- Final Versions Due: 31 JANUARY 2023
- Publication scheduled on: Issues 1-2 of 2023

#### Senior and Guest Editors

- ◆ Fabrizio Lamberti, Politecnico di Torino, Italy (Senior Editor of IEEE TCE)
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#### Instructions for authors

Manuscripts 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 Designed with Artificial Intelligence – Part I** should be selected. A cover letter should be also uploaded specifying the Special Section the manuscript is being submitted to.

Because of the strict timing of the review schedule, manuscripts that receive a “Minor revision” recommendation in the first round will be considered for publication in the context of this Special Section in the indicated issue(s). Manuscripts that will receive a “Major revision” recommendation will be considered for possible publication as regular papers in a next journal issue.