IEEE Consumer Electronics Magazine - *Call for Articles for a Special Issue*
Artificial Intelligence in Consumer Electronics

Artificial Intelligence (AI) and Machine Learning are becoming ubiquitous components in Consumer Electronics (CE). Virtual personal assistants, mobile devices, cameras, automotive electronics, wearable sensors and Internet of Things are among the many examples of technologies whose development is being powered by recent advances in Artificial Intelligence. At the same time, consumer devices are also enabler of AI development not only for the potential to collect large scale, real-life datasets, but also by providing innovative use cases and outlets where AI can be successfully applied. Nonetheless, the application of AI in CE brings at the forefront issues like robustness, user privacy protection, power consumption and dealing with noisy, uncurated data.

The goal of this Special Issue is to provide a platform for engineers, researchers, industrial experts and other stakeholders to appraise recent developments in the field and address related challenges. Contributions related to the practical, theoretical and engineering aspects of developing and deploying AI solutions are welcome on any applications of interest for the domain of CE (e.g. image enhancement, affective computing, processing of wearable sensor data, etc.). Articles pertaining ongoing technical developments, practical applications and use cases, user studies and evaluations, standardization efforts, current and future trend analysis, as well as next-generation technologies are welcome. Technical articles should be of general interest to an engineering audience and of broader scope than archival journal/transaction papers, are suited to the CE Magazine.

Topics of interest for this Special Issue include, but are not limited to the following:

- AI and ML applications targeting CE
- Deep learning applications for mobile devices
- Learning from consumer-generated data
- Image and video processing
- AI for affective computing and HCI
- AI for Internet-of-Things and Smart Sensors
- Deep learning (hardware and software) for mobile and embedded devices
- AI and ML for Mixed Reality and HMI
- Virtual personal assistants
- Privacy-preserving artificial intelligence
- Safety and security of AI for CE

Submission Procedure: Submissions should follow the IEEE template and should consist of the following: (i) A manuscript of maximum 6-page length, 11pt Times Font: A pdf of the complete manuscript layout with figures, tables placed within the text; (ii) A source file in Word or Latex format; (iii) High resolution original photos and graphics as JPEG files are required for the final submission. Images embedded in Word or Excel documents are not suitable; however, figures and graphics may be provided in a PowerPoint slide deck with one figure per slide. Articles which have been previously published at a conference need to have significant new material, which need to be described in the cover letter. The manuscripts need to be submitted online using: http://mc.manuscriptcentral.com/cemag.The authors need to select *"Special Section: Artificial Intelligence in Consumer Electronics (AICE)"* in Step-1 of the submission process to ensure that the article is reviewed for this Special Call. For any questions, please contact guest editor Lia Morra, Email: lia.morra@polito.it

Schedule (tentative):

Submission Deadline: June 30, 2019; Author notification: Oct 30, 2019; Publication Date: Mid 2020

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