IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on "VIRUS - GeneratiVe AI FoR Sustainable, Ethical, and Privacy Preserved ConsUmer Space- Opportunities, Challenges and Future Research Directions"

Theme:

Generative AI is a rapidly evolving field that aims to create artificial intelligence systems capable of generating new content, such as images, videos, music, and even text. This field has seen significant advancements in recent years due to the development of novel approaches to generative modeling, such as GANs, VAEs, and transformer-based models. These techniques have enabled the creation of realistic and high-quality content that can be used in various applications, including gaming, advertising, and entertainment. However, despite the significant progress made, there are still many challenges that need to be addressed in generative AI, such as improving the scalability and efficiency of models, ensuring fairness and transparency, and addressing ethical considerations. This special issue aims to provide a platform for researchers to discuss the opportunities, challenges, and future research directions in generative AI, with the goal of advancing the field and promoting its responsible use.

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

- Novel approaches to generative modeling such as generative adversarial networks (GANs), variational autoencoders (VAEs), and transformer-based models.
- Applications of generative AI in areas such as computer vision, natural language processing, and robotics.
- Evaluation and benchmarking of generative models.
- Ethical and social considerations in generative AI, including issues of bias, fairness, and transparency.
- Explainability and interpretability of generative models.
- Integration of generative AI with other AI techniques, such as reinforcement learning and supervised learning.
- Scalability and efficiency of generative models for large-scale data.
- Human-in-the-loop approaches to generative modeling.
- Advances in generative modeling for real-time applications.

Important dates:

- End of submission of Manuscripts: December 31, 2023
- Expected publication date (tentative): 3rd quarter, 2024

Guest Editors:

- Dr. Kapal Dev (Senior Member, IEEE) Munster Technological University, Ireland, Email: Kapal.dev@ieee.org
- Chih-Lin I. (IEEE Fellow) China Mobile Research Institute, China, Email: icl@chinamobile.com
- Dr. Sunder Ali Khowaja (Senior Member, IEEE) Korea Polytechnic University, Republic of Korea, Email: sunder.ali@ieee.org

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 **"VIRUS - GeneratiVe AI FoR Sustainable, Ethical, and Privacy Preserved ConsUmer Space- Opportunities, Challenges and Future Research Directions"** should be selected.

Editor-in-Chief: Dr. Kim Fung Tsang   kf.tce.eic@gmail.com