

IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on “Open Environment Data Mining in 6G Consumer Internet of Things”

Theme:

The 6G wireless networks target various innovative technologies and interfaces which will also enhanced the consumer electronics devices design to efficiently address various practical constraints in terms of power, computational capacity and storage capacity limitations. Consumer Internet of Things (CloT) refers to the integration of IoT technology into consumer electronics devices and applications. The 6G will seamlessly integrate technologies like artificial intelligence, big data, and advanced computing. This convergence will advance efficient and intelligent interconnection for CloT.

The realization of intelligent CloT benefits require data mining and pattern recognition of scene, target and relationship by analyzing the sensing data of various consumer electronics devices. Obviously, the actual sensing environment of customer electronics devices is open, which makes the dynamic drift of CloT sampling data characteristics, unknown scenes and targets constantly emerge. In general, open environment data mining in 6G CloT should pay more attention on the generalization, robustness and dynamic evolution of the algorithms to realize the autonomous intelligent mining methods adapted to the open environment.

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

- Concept drift detection for open environment data mining in 6G CloT
- New Class emerging for open environment data mining in 6G CloT
- Incremental Learning for open environment data mining in 6G CloT
- Continuous Learning for open environment data mining in 6G CloT
- Reinforcement Learning for open environment data mining in 6G CloT
- Few shot learning and Zero shot learning for open environment data mining in 6G CloT
- Decremental Features detection for open environment data mining in 6G CloT
- Incremental Features detection for open environment data mining in 6G CloT
- Objectives varied learning for open environment data mining in 6G CloT

Important dates:

- End of submission of Manuscripts: July 31, 2024
- Expected publication date (tentative): 2nd Quarter, 2025

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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 “**Open Environment Data Mining in 6G Consumer Internet of Things**” should be selected.