

IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on “Graph-powered Intelligent Data Processing for Consumer Electronics”

Theme:

Graph and big data analytics technologies make a powerful combination. Such technology can provide support for data science queries, graph analytics, window functions, percentile calculations, and advanced machine learning. It also offers advanced algorithms, such as page ranks, triangles, node connectivity, and node degree, allowing users to learn more about the relationships between data entities. However, the investigation of how to fully utilize the graph-powered intelligent data processing techniques, such as graph embedding, graph neural network, and graph convolutional network, to improve the performance of data management, knowledge discovery, information fusion, etc. is still at the very early stage. The diverse, dynamic, and large-scale graph data require different sophisticated graph-powered intelligent data processing methods, data mining techniques, advanced machine learning algorithms, etc., to be involved.

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

The goal of the special issue is to solicit high-quality original papers aiming at demonstrating effective and efficient graph-powered intelligent data processing techniques on data analysis, resource allocation, privacy preservation, architecture design, etc.

This special issue solicits the following topics, but not limited to:

- Graph processing systems
- Graph algorithms on parallel and distributed systems
- Graph classification, clustering, link prediction techniques
- Graph streaming processing/analytics
- Graph query optimization techniques
- Graph visualizations
- Graph machine learning in distributed systems
- Graph representation learning techniques
- Graph neural networks: convolutional, attention, recurrent
- Knowledge graph modeling and management techniques
- Graph-powered methods for real/industry applications and systems

Important dates:

- End of Submission of Manuscripts: **January 1, 2023**
- Expected Publication Date: July 2023

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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 **“Graph-powered Intelligent Data Processing for Consumer Electronics”** should be selected.