CALL FOR PAPERS

IEEE Transactions on Computational Social Systems

Special Issue on Advanced Cognitive Computing for Data-Driven Computational Social Systems

Data-driven Computational social systems (CSSs) aim to conduct pre-competitive research on architectures and design, modeling, and analysis techniques for cyber-physical systems, with emphasis on making full use of big data and artificial intelligence. However, due to the progressive transformation from host-centric networking to information-centric networking, CSSs pose fundamental challenges in multiple aspects, such as heterogeneous data generation, efficient data sensing and collection, real-time data processing, and greater request arrival rates. Recently, cognitive computing has emerged to provide new opportunities for the revolution of data-driven CSSs. With the help of advanced cognitive computing methods, we are able to discover new patterns and knowledge from large scale datasets, and to extract novel valuable information, which can promote product innovation, improves operation level, and production operation efficiency of manufacturing enterprises, and expand novel business models. To this end, exploring advanced cognitive computing technologies have great potential and capacity to enable new methodology, applications, and dramatic improvements for data-driven CSSs. This special issue aims to solicit high-quality original research papers, which address the cutting-edge theories, models, and applications for data-driven CSSs, supported by advanced cognitive computing technologies. Topics include but are not limited to:

- Cognitive computing methods and theory
- Cognitive computing based brain computer interface design
- Cognitive computing for socio-technical systems
- Cognitive computing for cyber-physical systems
- Cognitive computing approaches for industrial scenarios
- Brain computer interface based CSSs
- Big data-driven cognitive computing for CSSs
- Cognitive-inspired computing systems
- AI-assisted cognitive computing approaches
- Affective learning for decision support systems in CSSs
- Application of new and novel cognitive computing methods in data-driven CSSs

Important Dates:

Submissions Deadline: December 31, 2021
First Reviews Due: February 15, 2022
Revision Due: March 31, 2022
Acceptance Notification: May 15, 2022
Final Manuscript Due: June 15, 2022
Publication Date: 2022

Submission Guidelines:

All papers are to be submitted through the IEEE's Manuscript Central for Transactions on Computational Social Systems https://mc.manuscriptcentral.com/tcss. Please select "Special Issue" under Manuscript Category of your submission. All manuscripts must be prepared according to the IEEE Transactions on Computational Social Systems publication guidelines https://ieeesmc.org/publications/transactions-on-computational-social-systems.

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