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IEEE TRANSACTIONS ON COMPUTATIONAL SOCIAL SYSTEMS

Special Issue on Behavioral Modeling, Learning, and Adaptation in Cyber-physical Social Intelligence

The new generation of artificial intelligence (AI) is continuing to rapidly integrate machine intelligence and human intelligence to form Cyber-physical Social Intelligence, underpinning the growing interactions of cyberspace, physical space, and social space. With transformational developments in science and the society, a new challenge arises when uncovering essential mechanisms and principles of emerging multi-dimensional reality. To meet this challenge, it is important to understand and explore foundational characteristics of algorithmic theories and processes that constitute Cyber-physical Social Intelligence. The behavioral and cognitive enhancement of intelligent machines that promote a productive and creative partnership and collaboration between humans and the machines is vital to ensure an inclusive, sustainable, equitable, and resilient future for people and our planet. The goal of this special issue is to bring together academic researchers and industry professionals into an interdisciplinary forum, to showcase state-of-the-art research and applications in all aspects of machine intelligence, human intelligence, and cyber-physical-social intelligence, enabled by complex interactions of cyber, physical and social spaces. The central theme of the proposed special issue is *Behavioral Modeling, Learning, and Adaptation in Cyber-physical Social Intelligence*, with a focus on human-centered AI and data-driven modeling, analysis, control and optimization technologies and applications. Topics to be covered include, but are not limited to the following:

- Applications of AI and data mining for human adaptive systems
- Human factors in Production Service Automation
- Human-machine Interface Design
- Multimodality in Interactive and Adaptive Learning Environment
- Human factors in Healthcare/Medical Management Systems
- Emergency Evacuation, Planning and Response
- Security and Privacy in Cyber-physical Systems
- Cognitive Computation

Important Dates

- Paper submission deadline: March 31st, 2022
- Completion of the first-round review: May 31st, 2022
- Completion of the second-round review: August 31st, 2022
- Final submission due: September 30th, 2022
- Tentative publication date: November 30th, 2022

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Paper Submission

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://ieeemc.org/publications/transactions-on-computational-social-systems>. Please address inquiries to tang@rowan.edu.