Call For Papers

Session Topic: The Future of Social Interaction: BCI,	Cyber Physical Systems, and the Emergence of
Autonomous Social Intelligence.	
Conference: The 2023 International Conference on Cyber-physical Social Intelligence (ICCSI)	
Date: October 20-23, 2023	Meeting Mode: In-person
Location: Xi'an, China	Website: https://agist.org//iccsi2023

Description

The integration of Brain-Computer Interfaces (BCIs) in Cyber Physical and Social Interaction (CPSI) systems has the potential to fundamentally transform human-machine interactions. Such systems bring numerous advantages, including augmented accessibility for individuals with physical limitations, enhanced safety in hazardous environments, and elevated efficiency across various applications. With a focus on enhancing intelligence, cooperation, and autonomy, BCIs promise to revolutionize the way we interact with technology and one another. Despite the numerous benefits, there remain challenges to be addressed, from refining signal processing algorithms to establishing more effective communication channels between the brain and machine. We cordially invite you to participate in our conference session dedicated to the exploration of the latest trends and advancements in Brain-Computer Interface (BCI) research. This session provides an ideal platform for researchers, engineers, and anyone with a keen interest in the future of human-machine interaction to gain new insights, exchange ideas, and network with experts in the field. Your contribution through the submission of high-quality papers will help shape the future of BCI and its role in the realm of cyber physical and social interaction systems. We eagerly await your participation and look forward to a productive and enlightening session.

Interested topics include (but not limited to):

- 1) Human-centered Design and Engineering of BCI systems to improve their usability and effectiveness in realworld scenarios
- 2) Real-time Signal Processing and Machine Learning Techniques for BCI to enhance performance and accuracy
- 3) Development of Neural Interfaces for bidirectional communication between the brain and machine
- 4) BCI-based Rehabilitation Robotics for people with physical disabilities
- 5) Integration of BCI with Augmented Reality and Virtual Reality to enhance immersive experience
- 6) BCI-based Affective Computing for better understanding of emotions and moods in humans
- 7) Cognitive Assistance and BCI-based Brain-Machine Collaboration for enhanced efficiency and productivity
- 8) BCI-based Smart Home and Building Automation Systems
- 9) Integration of BCI and CPSI in Automated Driving and Transportation Systems
- 10) Development of BCI-based Intelligent Personal Assistants and Social Robots for improving human-robot interaction.

Important Dates:

March 31, 2023,	Letter of intent for paper contribution
May 15, 2023,	Full paper submission
July 1, 2023,	Acceptance/Rejection notification
August 31, 2023,	Final camera-ready papers due

Special Session Co-chairs:

Assoc. Prof. Xiaojun Yu, Northwestern Polytechnical University, email: <u>XJYU@nwpu.edu.cn</u> Assoc. Prof. Nan Li, Northwestern Polytechnical University, email: <u>nan.li@nwpu.edu.cn</u>

All inquiries about the session, including the letter of intent, should be sent to any of the co-chairs above