

Special Session on Intelligent Computing in Cyber-Physical Social Systems (CyberIC)

As an emerging paradigm, Cyber-Physical-Social Systems (CPSS) integrate the cyber, physical, and social worlds, generating significant research interest and attention. The development of CPSS and its capacity to deliver human-centric services is driven by remarkable advancements in computing technologies, particularly intelligent computing approaches that enhance system capabilities across multiple domains.

Intelligent computing encompasses methodologies inspired by natural biological principles, adapting these insights into innovative design solutions. The convergence of computing and communication technologies has established a new frontier in intelligent computing research and applications. For instance, integrating Computer Vision techniques with Intelligent Traffic Control systems significantly improves efficiency, convenience, safety, and quality of life in Smart Cities environments, demonstrating the practical value of intelligent computing within CPSS frameworks.

This is a special session of the 10th IEEE Cyber Science and Technology Congress. The session aims to collect the latest original contributions in intelligent computing and related improvements in CPSS, and offer new ideas, experiences and discussions by experts in this field. We encourage the submission of papers with new theory, analysis, methods, and applications.

Please submit your paper via the submission site at: [placeholder], and select the special session of “Intelligent Computing in Cyber-Physical-Social Systems” marked with “CyberIC”.

Accepted papers will be published by IEEE (IEEE-DL and EI indexed). Selected papers, after further extensions and revisions, will be recommended to journal special issues. More details at the conference website: [placeholder].

Topics include but are not limited to:

Operating Systems Practice for CPSS

Security, Trust, and Privacy in CPSS

Safety and Resilience for CPSS

AI and Machine Learning for CPSS (Including Safe Autonomy)

Architectures and Networking for CPSS

Software Platforms and Systems for CPSS

Tools, Testbeds, Demonstrations and Deployments of CPSS

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Important Dates

Paper Submission Due: August 15, 2026

Acceptance Notification Due: September 11, 2026

Final Manuscript Due: October 1, 2026