

Call For Papers

Special Session: Blockchain

Conference: The 2022 International Conference on Cyber-physical Social Intelligence (ICCSI)

Date: October 21-24, 2022

Meeting mode: Hybrid

Location: Nanjing, China

Web site: <https://iccsi2022.agist.org>

The emergence of Internet of Things (IoT), edge-fog-cloud computing, and interconnected network have enabled innovative solutions that will have a profound impact to our infrastructure and benefit consumers. However, the potential benefits also come with new challenges and concerns related to information security and privacy. Blockchain technology is a decentralized platform that can serve as single source of truth, provide data provenance and thereby realizing a trustworthy infrastructure. The chain of custody capability will provide an interoperable platform that would collapse the current siloed infrastructure and realize collaboration. The transparency of the platform will help build trust and ensure accountability

Researchers and practitioners have recognized the potential of blockchain technology as a trusted platform for the information and communication infrastructure. The integration of blockchain in current IT infrastructure would benefit several industry verticals, such as, finance, healthcare, manufacturing, energy, agriculture, defense, etc and realize applications such as credential management, insurance claim management, securing personal information, verifying and transferring land ownership, electronic voting, non-fungible tokens, logistics and supply chain tracking, amongst several others.

The Blockchain Special Session in ICCSI will bring researchers and practitioners together to present and discuss the latest developments and technical solutions concerning various aspects of blockchain technology. The special session seeks original unpublished papers focusing on theoretical analysis, emerging applications, novel system architecture construction and design, experimental studies, and social impacts of blockchain. Both review/survey papers and technical papers are encouraged. The Special session also welcomes short papers that summarize speculative breakthroughs, work-in-progress, industry featured projects, open problems, new application challenges, visionary ideas, and preliminary studies.

Suggested topics include, but are not limited to, the following:

- Blockchain based cyber physical systems
- Blockchain based information hiding/encryption
- Blockchain based lightweight algorithms and protocols for IoT
- Blockchain based security and privacy solutions
- Blockchain enabled novel applications and services
- Smart contract and distributed ledger
- Security, privacy and trust of blockchain based decentralized systems
- Blockchain in critical infrastructure resilience (power grid, oil and gas, etc)
- Blockchain for supply chain protection
- Blockchain for networked identity management
- Scalability of Blockchain
- Secure Blockchain based identity management systems
- Interoperable Blockchain systems
- Blockchain infrastructure for public transit management
- Blockchain for universal data storage

Important Dates:

May 15, 2022,	Full paper submission
July 1, 2022,	Acceptance/Rejection notification
August 31, 2022,	Final camera-ready papers due

Special Session Chair:

Prof. Sachin Shetty, Old Dominion Univ., email: sshetty@odu.edu