



2nd Workshop on “Scalable, Secure and Intelligent Blockchain for Future Networking and Communications”



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Important Dates

- ❖ Submission deadline:
January 20, 2022
- ❖ Notification of acceptance:
March 06, 2022
- ❖ Camera-ready papers:
March 15, 2022

Submission link

<https://edas.info/N28800>

Webpage link

<https://icc2022.ieee-icc.org/program/workshops>

Scope

Blockchain, as a distributed ledger technology, has drawn tremendous attention in various applications and fields in the past few years. The evolution of blockchain technologies has experienced a series of challenges including malicious behaviors occurred in blockchains, low throughput, and poor scalability, and etc. Various theories, frameworks, consensus models, and sophisticated mechanisms have been proposed to deal with the above problems of the blockchain but all suffer from limited performance. The recent advances in Artificial Intelligence (AI), however, have brought new opportunities in overcoming the challenges of blockchains, spawning a new direction named Intelligent Blockchain. However, aiming towards more scalable, secure, and intelligent blockchains, there is still a long way to go.

As we believe, the future networking and communications will closely fuse with the development of the 5th Generation (5G) and Beyond-5G technologies. Meanwhile, a series of technical issues are emerging in the era of future networking and communications, such as the privacy and security of user data, the supervision of malicious behaviors, the addition of user identities, resource allocation. Once the blockchain technology becomes more scalable, secure and intelligent in the near future, it will spark more blue-sky thinking, and innovative ideas that can improve the future networking and communications to another level with strong performance guarantee.

Topics

The goal of this full-day workshop is to bring together researchers and experts from academia, industry, and governmental agencies to discuss and promote the research and development needed to overcome the major challenges that pertain to this cutting-edge research direction. The scope of this workshop includes but not limited to the following topics:

- AI-enabled Blockchain Solutions for Future Networking and Communications.
- AI-enabled Cloud and/or Edge Computing Orchestration over Blockchains for Future Networking and Communications.
- AI-enabled Resource Allocation and/or Incentive Mechanisms for Secure and Scalable Blockchains in Future Networking and Communications.
- Scalable and Secure Blockchain Systems for Future Intelligent Networking and Communications.
- AI-empowered Smart Contracts for Future Networking and Communications.
- Fraud-Detection based on Blockchain data and Smart Contracts using AI.
- Data Analytics to Identify Malicious Behaviours on Blockchains.
- New Architectures/Frameworks/Protocols for Scalable, Secure and Intelligent Blockchain in Future Networking and Communications.
- Privacy and Security Issues for Intelligent Blockchains in Future Networking and Communications.
- Blockchain-driven Intelligent Applications/Services for Future Networking and Communications.
- Proof-of-Concept Blockchains for Future Networking and Communications: Experimental Prototyping and Testbeds.

Paper Submission

The workshop will feature 2-3 keynote speeches given by world leading researchers in the field. The workshop accepts only original and previously unpublished papers. All submissions must be formatted in standard IEEE camera-ready format (double column, 10pt font). The maximum number of printed pages is six including figures without incurring additional page charges.