

The 2nd ACM International Symposium on Blockchain and Secure Critical Infrastructure (BSCI 2020)

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Call for Papers

Blockchain is a decentralized transaction and data management technology that was voiced by its implementation in Bitcoin. In recent years, Blockchain has been achieving an ever-growing popularity, along with the upgrades of networking capacity. The reason for the interest in Blockchain is its central attributes that provide security, anonymity and data integrity without any third-party organization in control of the transactions, and therefore it is applied in numerous fields, including securing critical infrastructure.

As technology advanced, critical infrastructures increasingly come to rely on digital control systems and networking. Attacks on critical infrastructure sites are currently a fact of life rather than a potential threat. For example, power stations, chemical plants, telecommunication stations and nuclear facilities are tempting targets to cyber-attacks.

In this scene, the question remains on why and how we can utilize blockchain techniques to secure critical infrastructure. Prior methods of protecting critical infrastructure have been plagued by centralized weaknesses and single points of failure problems. Contemporarily, Blockchain can offer cryptography for transactions and data in trustless distributed networks to enhance the reliability and resilience of the critical infrastructure. In other words, increasingly open and security needs is forcing us to shore up defenses with developing blockchain technology to help secure distributed critical infrastructure.

The aim of this academic get-together, IEEE International Symposium on Blockchain and Secure Critical Infrastructure, is to collect latest research results concerning Blockchain and secure critical infrastructure on relevant scenarios, such as the ones subsequently listed. Researchers, experts, and scholars from both industry and academia are encouraged to share their recent studies, investigations, and findings in this forum.

Topics of particular interest include, but are not limited to:

- Blockchain Advances in 6G Network
- Smart Contract Methods in Intelligent Control System

- Technical issues of Blockchain and Secure Critical Infrastructure (architecture, functionality, workflows, availability, scalability, challenges of implementation, etc.)
- Security and Privacy in Blockchain and Critical Infrastructure
- Attacks on Blockchain and Critical Infrastructure
- Blockchain and Secure Critical Infrastructure with Smart Grid
- Blockchain and Secure Critical Infrastructure with Industry 4.0
- Impact on business models (change of existing business models, emergence of new business models, disruptive business models, etc.)
- Blockchain Advance in Secure Smart Grid
- The future applications of Blockchain and Secure Critical Infrastructure in different areas (finance, insurance, healthcare and pharmaceuticals, energy sector, education, transportation, media production, government sector etc.)

In addition to the technical research achievements, all qualified submissions in relevant subtopics (including novel industrial topics) not mentioned here are welcomed, too. Nevertheless, articles focusing on describing standards or commercial purposes are not considered as acceptable contents for this symposium. High quality submissions will be recommended to a few journal special issues that are currently being applied for.

Submission Instruction:

Submitted papers must not substantially overlap papers that have been published or that are simultaneously submitted to a journal or a conference with proceedings. **All submissions should be appropriately anonymized and a DOUBLE-BLIND REVIEW policy will be applied during the review process.** Submissions must be in double-column ACM SIG Proceedings format, and should not exceed the following page limit.

- Full-Length Paper = 12 Page Limit + up to 2 extra pages for appendices only
- Short Paper = 6 Page Limit + up to 2 extra pages for appendices only
- Poster/Late Breaking = 3 Page Limit (for all content, no extra pages)

Position papers describing the work in progress are also welcome. Only pdf files will be accepted. Authors of accepted papers must guarantee that their papers will be presented at the workshop. At least one author of the paper must be registered at the appropriate conference rate. Accepted papers will be published in the ACM Digital Library. This symposium will grant a few awards, including ACM Best Paper Award and ACM Best Student Award.

Paper submission site: [EasyChair](#)

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Important Dates

Submission Deadline: January 30, 2020
Paper Notification: February 16, 2020
Camera Ready Version: March 15, 2020

Organization Committee

Program Chairs

Keke Gai, Beijing Institute of Technology, China
Kim-Kwang Raymond Choo, University of Texas at San Antonio, USA
Jiamou Liu, University of Auckland, New Zealand