

AIBlocks 2019

The 1st IEEE International Workshop on AI and Blockchain Systems

In conjunction with 4th IEEE Cyber Science and Technology Congress ([CyberSciTech 2019](#))
August 5-8, 2019, Fukuoka, Japan

CALL FOR PAPERS

In modern computing ecosystem, data is captured from various sources and is transmitted from devices (e.g., IoT) through the networks. Artificial intelligence (AI) and its derivatives have been used as powerful tools to analyze and process the captured data to achieve high quality and productivity with low cost. The 2016 DARPA Cyber Grand Challenge highlighted that automated AI-based cyber-reasoning systems can be effective in addressing security issues. Although AI is powerful and can be engaged with distributed computing, deceptive analysis would be generated when corrupted or dishonest data is intentionally or unintentionally integrated by a malicious third-party, and this calls to mind the popular phrase “AI is only as good as the data you feed it”. As a result, AI-based systems have recently been proven vulnerable to attacks based on automated generation of adversarial inputs.

Rapid advances, on the other hand, are being made in blockchain world (both in the number of published papers and the number of active researchers) with broadly diverse applications that promise to better meet business and individual security needs. Blockchain as a popular ledger technology has the potential to be leveraged in different aspects of cyber space. The blockchain attempts to reduce transaction risks and financial fraud, due to characteristics such as decentralization, verifiability and immutability for ensuring authenticity, reliability and integrity of data. When the trust and reliability of the data can be ensured, more secure and trustworthy outcomes can be produced by the AI. This workshop’s goal is to provide a forum for researchers and practitioners in academia and industry to discuss research results and experiences that explore the interplay between two highly discussed disruptive technologies “AI and Blockchain” to understand how they can help one another in B2B and M2M environments.

TOPICS:

Workshop suggested topics include, not exhaustively, empirical and theoretical studies of the following:

- Machine learning techniques and applications in blockchain systems
- Applications of blockchain technologies in AI-based systems
- Blockchain-based threat intelligence and threat analytics techniques
- Applications of AI in blockchain systems
- AI and blockchain enabled cyber physical systems
- AI based mobile computation
- Blockchain-AI solutions for enterprise-friendly tools
- Forensics readiness of blockchain technologies
- AI based big data analysis for blockchains
- Security and privacy aspects of blockchain technologies
- Sidechain technologies for AI
- Future of AI and blockchain

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Important Dates

Submission Due: **April 30, 2019**

Authors Notification: **May 25, 2019**

Camera-ready: **June 20, 2019**

Submission:

All accepted papers will be
published by IEEE in
Conference Proceedings
(IEEE-DL and EI indexed).

[Link](#)