

Call for Contributions for

Submission:

1. **Inform the Chair:** with the Title of your Contribution

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=CYBER+2018+Special>

Please select Track Preference as **BC4IOT**

Special track

BC4IOT: BlockChain for the Internet of Things

Chair and Organizer

Dr. Xing Liu, Kwantlen Polytechnic University, Surrey, B.C., Canada

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along with

CYBER 2018, The Third International Conference on Cyber-Technologies and Cyber-Systems

<http://www.iaria.org/conferences2018/CYBER18.html>

November 18 - 22, 2018 - Athens, Greece

Internet of Things (IoT) refers to systems with networked entities (“things”) that collaborate to achieve certain goals. The things are usually autonomous, equipped with sensors and actuators, able to process information and make decisions, and communicate with each other. The characteristics of the IoT ecosystem include multiple connected devices and huge amount of data.

IoT requires a secure way to track the identities and activities of every "thing" in the network and prevent attacks that are frequently originated from endpoint devices. Security remains a top concern for IoT. Ensuring trust and security across all elements of the IoT ecosystem is essential for its widespread adoption.

Blockchain has emerged as the solution for IoT security concerns. A Blockchain is a distributed database of trustworthy, permanent and immutable data records which can be tracked and analyzed. It offers the potential for improving the overall security of the IoT environment. Deployment and operation costs of IoT can be reduced through Blockchain because no intermediaries are required. IDC predicts that, by 2019, 20% of all IoT deployments will have some sort of Blockchain services enabled.

This special track will provide a forum for researchers and industrialists to share recent research results on the how Blockchain can be used to improve IoT security and efficiency and share experiences in applying the results in various IoT domains such as smart home, smart city, smart environment and smart health.

Topics include, but not limited to:

- Overviews of Blockchain and IoT convergence
- Case studies of Blockchain applications in IoT
- Blockchain for IoT device identification, authentication, authorization and access control
- IoT system security using Blockchain
- IoT data security using Blockchain
- Secure firmware update of IoT embedded devices using Blockchain
- Smart city service management using Blockchain
- IoT resource and service sharing using Blockchain
- IoT sensor data storage and management using Blockchain
- IoT sensor data privacy preserving using Blockchain
- IoT device identity management using Blockchain

- IoT data provenance using Blockchain
- IoT supply chain management using Blockchain
- Trustworthy IoT systems using Blockchain
- Integrity of IoT (integrity of things)
- Blockchain based design of IoT ecosystems
- Blockchain for M2M communications
- Secure logistics of IoT systems using Blockchain
- Blockchain and IoT system integration
- IoT system infrastructure using Blockchain
- IoT-ready Blockchain platforms
- Testbeds of Blockchain-based IoT systems
- Development tools of Blockchain-based IoT systems
- Performance analysis of Blockchain-based IoT systems
- Blockchain for low power local area IoT networks
- Blockchain for low power wide area IoT networks
- Blockchain applications in smart products, smart homes, smart health, and smart cities
- Blockchain applications in smart transport and power distribution
- Blockchain applications in smart manufacturing and smart agriculture

Important Datelines

- Inform the Chair: As soon as you decided to contribute

Submission; ~~August 4~~ **October 5**

Notification: ~~September 4~~ **October 20**

Registration: ~~September 15~~ **October 30**

Camera-ready: ~~September 25~~ **October 30**

Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <http://www.iaria.org/format.html>

- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at <http://www.iaia.org/registration.html>

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