The 9<sup>th</sup> Workshop on Blockchain Based Secure Trust Environment Model for Internet of Things [B-STEM-IoT]

> October 12-27 2023 Aveiro Congress Center, Portugal

In conjunction with IEEE WF-IoT 2023



## Organizing Chairs:

Madhusudan Singh

Oregon Institute of Technolgoy (Oregon Tech) USA Dhananjay Singh Saint Louis University, USA

**Programme Committee:** 

Rodrigo da Rosa Righi, Unisnos, Brazil N.S. Rajput, IIT-BHU, India Pooja Khanna, Amity University, India Atul Kumar, Oracle, India Md. Iftekhar Salam, Xiamen University, Malayasia Hasanan Baber, ADSM, UAE Priyan Kumar, Gannon University Hasan Tinmaz, Woosong University, South Korea

### Important dates:

Paper submission: Jul 30, 2023 Notification of acceptance: Aug 21, 2023 Camera-ready submission: Sep 29, 2023 Presentation submission: Oct 2, 2023





# Description:

IoT devices have expanded data collection and processing, but they also present privacy and security concerns. IoT data reliability is a big issue here. Blockchain might secure the IoT. This session will cover B-STEM-IoT's Secure Trust Environment Model. IoT device trust issues and blockchain technologies will start the workshop. A distributed ledger records transaction in B-STEM-IoT. Consensus, smart contracts, and cryptography secure and access IoT data. Real-world B-STEM-IoT applications will follow. Supply chain, healthcare, energy, and smart home situations will be examined. Each use case group will create a B-STEM-IoT proof-of-concept. Blockchain in IoT systems concludes the program. Share ideas, learn from others, and explore methods to advance this burgeoning profession. Attendees will learn about the B-STEM-IoT paradigm and how to build trustworthy and secure IoT systems.

### **Topics of Interest:**

This workshop invites IoT security contributions from linked devices and resource restrictions, network theoretic analysis, security design, and experimentation. To explore IoT security, cryptography, embedded security, and hardware security. This workshop's subjects include:

- Advanced Internet of Things (A-IoT): Perspective, Challenges and Future
- Blockchain based architecture, design, implementation and management of IoT.
- Blockchain Functional security, standards, and certification: Proof of Work, Ledger, Smart Contracts Cryptography
- Blockchain Security Techniques and protocols for Connected things
- Blockchain Security mechanism for Wireless communication in dynamic environments
- Internet of things Security
- Lightweight Cryptography for IoT Devices
- IoT data Security Sea & Space applications

### Paper Submission:

All papers must be submitted through <u>eWorks</u>. You must choose the workshop track (Work-07) when submitting your paper in order to be considered for this workshop. The paper should be up to six (6) pages in length. The conference allows up to two additional pages for a maximum length of eight (8) pages upon payment of extra page fees once the paper has been accepted.

The paper can be prepared using the template available through the Authors / Proposers tab from the WF-IoT conference website main page at: <a href="https://wfiot2023.iot.ieee.org">https://wfiot2023.iot.ieee.org</a>.

An alternative is to use the IEEE Word or Latex tools that can be found through: <u>https://conferences.ieeeauthorcenter.ieee.org/write-your-paper/authoring-tools-and-templates/</u>.

Authors of accepted papers will need to provide a final version of your paper in PDF format and upload it by the camera-ready deadline and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, at least one author is required to register for WF-IoT 2023 by the deadline.

### More information on the workshop:

https://wfiot2023.iot.ieee.org/9th-workshop-blockchain-based-secure-trust-environmentmodel-internet-things-b-stem-iot