IEEE International Workshop on Towards Standardized Secured IoT B5G Networking: Artificial Intelligence and Blockchain (AB-SIoT)

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General Co-chairs

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Important Dates

- **Paper submission deadline:** **January 20, 2021**
- **Notification of acceptance:** February 20, 2021
- **Camera-ready papers:** March 1, 2021

Submission link
https://edas.info/N27513

Webpage link
https://bit.ly/34VNOYr

Scope

The amazing IoT development offers a smart high-level concept for integrating physical and cyber objects. In the coming decade, there will be hundreds of billions of IoT connections. It is inevitable that IoT will find applications in all walks of our lives, spanning energy management, healthcare, transportation, and fin-tech, to name a few. Nonetheless, the intrinsic uncoordinated frequency band and the ever-growing IoT market poses various critical challenges on public safety, cybersecurity and data privacy. To facilitate IoT best practices, various international and industrial standards should be brought to the scene. These include, for instance, IEEE P2668, IEEE 1451 family, ISO 27k family, Privacy Impact Assessment (PIA), General Data Protection Regulation (GDPR), etc.

This workshop specifically solicits research and practical works towards the future networks of IoT B5G, mainly embracing artificial intelligence and blockchain, and their interaction, in addition to standardization of IoT devices and the creation of maturity index for their evaluation, grading and ranking (i.e. IEEE P2668). We solicit papers addressing new ideas, standardization, best practices, and innovative applications of IoT, including industrial IoT (IIoT), that will be adopted in the future, and the new requirements of such applications, mainly building on artificial intelligence and blockchain. Moreover, efforts towards standardization of IoT devices, and the creation of a global index for the maturity of IoT devices are also invited to submit their contributions to the workshop.

For practical solutions and more interesting fruitful discussion, **our workshop will include a demonstration session**, where authors can showcase experimental setup of their work, either by bringing demonstrative testbeds, or through pre-recorded video-clips, showing their experiments. ***Priority will be given to papers, that include demonstrative testbeds or showcases.***

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- 5G, NB IoT, uncoordinated LPWAN, 6G, and B5G, towards IoT/IIoT
- Artificial intelligence towards optimization of IoT networks
- Machine Learning techniques for IoT data modeling and analysis
- Quality of Information in heterogeneous IoT networks
- Blockchain in smart networking and future B5G IoT networks
- Security threats in IoT networks, standards and best practices
- Maturity index and quality assurance of IoT devices towards security and privacy
- Challenges facing adoption of AI and blockchain in IoT networks
- Inherently safer products and equipment
- Regulations and standards
- AI and Blockchain in Fog/Cloud Computing for IoT
- Integration of AI and blockchain towards enhanced/optimized IoT networks
- Human factors and risk management
- Product Compliance, smart sensors compliance
- Industrial Internet – Value creation and challenges
- Legal and governance frameworks for IoT regulation
- Efforts towards standardization of IoT devices
- Demonstration and showcases of AI and/or blockchain towards future B5G networking

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of six (6) printed pages (10-point font) including figures. No more than one (1) additional printed page (10-point font) may be included in final submissions and the extra page (the 7th page) will incur an over length page charge of USD100. For more information, please see IEEE ICC 2021 official website: https://icc2021.ieee-icc.org/authors