



1st Workshop on Wireless Intelligent Secure Trustable Things: bringing IoT and AI together @ IEEE 7th World Forum on Internet of Things 20-24 June 2021 // New Orleans, Louisiana, USA

ORGANIZING COMMITTEE

General Chair:

Hans-Peter Bernhard (JKU, SAL, Linz/AT)

Technical Program Chair:

Leander Hörmann (LCM, Linz/AT)

Finance Chair:

Ashutosh Simha (TU-DELFT/NL)

Organizers:

Fjolla Ademaj (SAL/AT)

Ali Balador (RISE/SE)

Ken Brown (UCC/IR)

Michael Karner (VIF/AT)

Stefan Marksteiner (AVL/AT)

Peter Priller (AVL/AT)

Ramiro Sámano Robles (ISEP/PT)

Mujdat Soyturk (Marmara Univ./TR)

Andreas Springer (JKU/AT)

Matti Vakkuri (HALTIAN/FI)

Ranga Rao Venkatesha Prasad (TU DELFT/NL)

IMPORTANT DATES:

Submission deadline:

Feb. 21st, 2021

Author notification:

March. 21st, 2021

Final submission:

April. 21st, 2021

Submission opens:

Nov. 15th, 2020

DESCRIPTION

The digital transformation is going to change our society in almost every aspect. The conjunction of wirelessly connected cyber-physical systems with powerful edge and cloud applications brings along the Industrial Internet of Things (IIoT), thus pushing digitalization not only into our home and our cities but also into our industry. The next step will bring Artificial Intelligence of Things (AIoT) as the natural evolution for both Artificial Intelligence (AI) and Internet of Things (IoT), as they are mutually beneficial. AI increases the value of the IoT through machine learning by transforming data into useful information, while IoT increases the value of AI through connectivity and data exchange.

Among several issues to be solved to make this vision become reality, trust in a secure, safe and dependable operation in both AI and IIoT are probably the most important ones.

In this workshop we will highlight recent advances in secure and trustable wirelessly connected IIoT as well as explainable, safe and secure AI methods, and mutual benefits from combining these approaches.

This workshop is organized by the pan-European research project InSecTT (<https://www.insectt.eu/>), in cooperation with project Reliance (<https://projectreliance.com/>). InSecTT stands for Intelligent Secure Trustable Things, combining effort of 52 key partners from 12 countries (EU and Turkey). The project aims at creating trust in AI-based intelligent systems and solutions as a major part of the Artificial Intelligence of Things (AIoT).

FOCUS ON:

The Workshop will be focusing on AI/ML based Solutions, Methods, Demonstrations (typical on higher Technology Readiness Level) covering theoretical and implementation aspects of security, privacy, safety and trust for IIoT for the following topics, but not limited to:

- Advanced wireless sensor networks (WSN) and IIoT concepts for industrial use cases in domains like automotive, aeronautics, building, health, robotics, smart manufacturing, with the focus on one or more of the following attributes: security, safety, reliability, trustability
- Innovative energy-constrained and autonomous IIoT components
- Dependable WSN with enhanced energy efficiency, robustness and quality-of-service
- Physical layer and out-of-band security in WSN applications
- AI-improved physical layer
- Routing and scheduling algorithms for reliable real-time WSNs
- Secure identification, authentication, authorization and communication in WSN
- Trust anchors and trust indicators for secure IIoT systems
- Edge and Cloud computing services for safe and secure connected mobility applications

SUBMISSION OF PAPERS:

All final submissions should be written in English with a maximum paper length of six (6) printed pages see web conference for instructions. Papers must be submitted through <https://epapers.org/wf-iot2021/ESR/login.php>. See conference web page for instructions: <https://wfiot2021.iot.ieee.org/authors-proposers/>. Conference:

Jun. 20th – 24th 2021

New Orleans, USA

Acknowledgement:

InSecTT has received funding from the ECSEL Joint Undertaking (JU) under grant agreement No 876038. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Austria, Sweden, Spain, Italy, France, Portugal, Ireland, Finland, Slovenia, Poland, Netherlands, Turkey.