# 27<sup>th</sup> INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES AND FACTORY AUTOMATION 2022 STUTTGART, GERMANY SEPTEMBER 6<sup>th</sup>-9<sup>th</sup> 2022

## **Call for Papers**

## 2<sup>nd</sup> Workshop on Wireless Intelligent Secure Trustable Things AloT: bringing Al and IoT together

### **Organized and Co-Chaired by**

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FOCUS: Digital transformation is going to change our society in almost every aspect. The marriage of cyber-physical systems via wireless connectivity with powerful cloud applications will bring along the industrial internet of things (IIoT), pushing digitalization not only into our home and our cities but also into industry. Further, the 'Artificial Intelligence of Things (AIoT) incorporates AI/MI into IoT. AI offers more effective exploitation of the IoT networks, enabled by the real-time data streams. This workshop focuses on AIoT, in the context of the need for security and trust in the technology.

#### **\* TOPICS:**

- Novel AI/ML technology for AIoT
- Real-time and safety-critical communication and edge processing
- Developing industrial-grade secure, safe, and cyberattack proof AIoT
- Theoretical aspects of security, privacy, safety, and trust for AIoT
- Trust and user acceptance for explainable AI/ML providing user control
- Trust anchors and trust indicators for secure AIoT systems
- Edge and cloud computing services for safe and secure connected mobility
- Energy- and processing-efficiency for autonomous AIoT with energy harvesting
- Application, WSN and AIoT concepts for industrial use cases in domains like automotive, aeronautics, building, health, robotics, smart manufacturing
- Dependable WSN focusing energy efficiency, robustness, and quality-of-service
- Physical layer and out-of-band security in WSN applications
- Secure identification, authentication, authorization, and communication in WSN
- Routing and scheduling algorithms for reliable real-time WSNs
- AIM: Trust in a secure, safe, dependable and explainable operation of AIoT is probably the most important issue to be solved. Establishing trust and dependability is especially challenging in wireless communication networks. Various local area wireless technologies as well as 5G/6G are focused as such but we target specifically security, safety and dependability research contributions. Particularly in the AIoT domain, these issues are pivotal for societal acceptance. In this workshop, we therefore seek contributions on recent advances in secure and trusted wirelessly connected AIoT.
- WORKSHOP FORMAT: To explore the general topic two keynotes will be held, and original research work is presented which must be submitted to ETFA according to all submission guidelines. Prospective authors are invited to electronically submit full regular papers (limited to 8 pages) of their work. English is the working language of the conference. Accepted papers must be presented at the workshop in order to be included in the ETFA conference proceedings available at IEEE Xplore.

#### ✤ AUTHOR'S SCHEDULE (2022):

Regular and special sessions papers	
Submission deadline	May 13
Acceptance notification	June 10
Deadline for final manuscripts	June 24





Workshop: September 6, 2022

#### **Workshop Program Committee**

- Fjolla Ademaj, SAL/AT
- Melanie Bouroche, Trinity College Dublin/IR
- ✤ Carlo Alberto Buano, TU Graz/AT
- Tapio Heikkilä, VTT/FI
- Leander Hörmann, LCM/AT
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- Georg Macher, TU Graz/AT
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- Peter Priller, AVL/AT
- \* Ramiro Sámano-Robles, ISEP/PT
- Gerd Scholl, HSU-HH/DE
- Mujdat Soyturk, MARUN/TR
  - Andreas Springer, JKU/AT
  - Salvatore Tedesco, Tyndall/IR

InSecTT – Intelligent Secure Trustable Things, a pan-European effort with 54 key partners from 12 countries (EU and Turkey), will provide intelligent, secure and trustworthy systems for industrial applications to bring the Internet of Things and Artificial Intelligence together. Visit us at <u>https://www.insectt.eu</u>

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