# The 1<sup>st</sup> International Workshop on Cybersecurity Issues of IoT in Ambient Intelligence (AmI) Environment

http://cyber-science.org/2022/assets/files/ws-ss/cst/AmI2022 CFP.pdf

In conjunction with

The 20th IEEE International Conference on Pervasive Intelligence and Computing (PICom 2022)- IEEE CyberSciTech/PICom/DASC/CBDCom 2022

September 12-15, 2022 - Physical Conference

Calabria University, Italy, 12-15, September 2022

<a href="http://cyber-science.org/2022/picom/">http://cyber-science.org/2022/picom/</a>

## **Scope and Motivation:**

Over the years, the use of the Internet of Things (IoT) has come to dominate several areas, e.g., improving our lives, offering us convenience, and reshaping our daily work circumstances in the process. Ambient intelligence (AmI) refers to the ability of devices to interact seamlessly with their surroundings. The increased use of IoT in ambient intelligence has led to a heightened concern for cybersecurity. Hackers could exploit vulnerabilities in the software or firmware of IoT devices to gain control of the devices or the networks they are connected to. They could also use ambient intelligence systems to collect sensitive data from IoT devices. In order to protect these devices, it's essential to understand the various types of attacks that are possible and deploy appropriate security measures. In recent years, Artificial Intelligence (AI) has got a lot of attention, especially for the success of deep learning to address problems that were considered hard before.

## **Scope and Topics**:

The proposed special session (workshop) provides a forum for bringing together researchers from academia and industry to explore and present their findings in Artificial Intelligence, cybersecurity issues of IoT, and AmI. The participants are encouraged to discuss the theories, systems, technologies, and approaches for testing and validating them on challenging real-world, safety-critical applications. Thus, suggested topics include, but are not limited to, the following points:

- Formal security and resilience analysis on Al.
- Cognitive models and bio-inspired AI.
- Al-Assisted Critical Infrastructure Security.
- Applied Cryptography for AI and AMI.
- Security and Privacy of Aml and/or IoT.
- Applications of Formal Methods to Aml Security.
- Blockchain for Trustworthy AmI-based applications.
- Embedded Systems Security.
- Cyber Threat Intelligence for AI and AmI.
- Privacy-Preserving Machine Learning.

# **Submission and Publication**

Authors are required to submit fully formatted, original papers (PDF), with graphs, images, and other special areas arranged as intended for the final publication. Papers should be written in English

conforming to the IEEE standard conference format (two-column, 10 pt font, etc., including figures, tables, and references). The review submissions are limited to six pages, (additional charges may apply for additional pages). Conference content will be submitted for inclusion into IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. IEEE formatting information:

Papers must be submitted though the EasyChair conference submission link (<a href="https://easychair.org/conferences/?conf=dascpicomcbdcomcyber">https://easychair.org/conferences/?conf=dascpicomcbdcomcyber</a> ) by choosing "PICom / 1st International Workshop on Cybersecurity Issues of IoT in Ambient Intelligence (AmI) Environment".

Submission link through EasyChair: <a href="https://easychair.org/conferences/submission\_new?a=28668548">https://easychair.org/conferences/submission\_new?a=28668548</a>

### **Accepted Papers**

All the accepted papers must be presented in the workshop and will also be included in the IEEE CyberSciTech proceedings, which will be published by IEEE CPS (EI indexed, in IEEE DL). All accepted papers will be published in the conference proceedings and presented for inclusion in IEEE Xplore Digital Library. For more details, please visit the CyberSciTech 2022 official website (<a href="http://cyberscience.org/2022/cyberscience/">http://cyberscience.org/2022/cyberscience/</a>

Best Paper Awards will be presented to high quality papers.

## **Important Dates:**

Submission Due: June 1, 2022

Author Notification Due: July 1, 2022

Final Camera-ready Submission: July 15, 2022

#### **Organizing Committee:**

- Co-chair: Pr. Abdellah Chehri, University of Quebec, UQAC, Canada. Email: achehri@uqac.ca
- Co-chair: Pr. Gwanggil Jeon, Incheon National University, Korea. Email: gjeon@inu.ac.kr
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- Co-chair: Pr. Marco Anisetti, University of Milan, Italy. Email: marco.anisetti@unimi.it

# **Technical Program Committee**

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