

Call for Contributions for

Submission:

1. **Inform the Chair:** with the Title of your Contribution

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=CYBER+2018+Special>

Please select Track Preference as **ES4IOT**

Special track

ES4IOT: Embedded Systems for the Internet of Things

Chair and Organizer

Dr. Xing Liu, Kwantlen Polytechnic University, Surrey, B.C., CAanada

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along with

CYBER 2018, The Third International Conference on Cyber-Technologies and Cyber-Systems

<http://www.aria.org/conferences2018/CYBER18.html>

November 18 - 22, 2018 - Athens, Greece

Internet of Things, or IoT, refers to systems with networked physical entities that collaborate to achieve certain goals. Examples of IoT systems include smart homes and smart cities. The physical entities are sometimes referred as “nodes”, “objects”, “devices”, or “things”. They are usually autonomous, are equipped with sensors and actuators, are able to process information, make decisions, and communicate with each other. The things are nowadays mostly built using embedded systems.

In order to realize the full potential of IoT, the embedded systems need to be Internet-ready, have strong data processing and communication capabilities, and be secure. Development tools need to be readily available. Enabling technologies are on the rise. Large number of novel hardware and software products is being developed.

This special track will provide a forum for researchers and industrialists to share recent research results on the design and development of IoT processors, IoT development boards, and IoT operating systems, enabling technologies for IoT embedded systems, security of embedded systems, development tools, as well as embedded system applications in building IoT devices.

Topics include, but not limited to:

- Emerging IoT processors
- Emerging IoT development boards
- Emerging IoT embedded operating systems
- Emerging development tools for IoT embedded systems
- IoT embedded system design
- Security of IoT embedded systems
- Root of trust and secure boot of IoT embedded systems
- Run-time security and secure execution environment for IoT embedded systems
- Physical security of IoT embedded systems
- Attacks and mitigation mechanisms in IoT embedded systems
- Intrusion detection for IoT embedded systems
- End-to-end security protocols for IoT systems
- Privacy leakage and mitigation mechanisms for IoT embedded systems
- Dependability of IoT embedded systems

- Interoperability of IoT embedded systems
- Artificial intelligence in IoT embedded systems
- Machine learning in IoT embedded systems
- Real-time operating systems for IoT embedded systems
- Embedded systems for IoT device development
- Power management in IoT embedded systems
- Energy harvesting in IoT embedded systems
- Programming languages for IoT embedded systems
- Embedded systems and IoT edge computing
- IoT embedded system development kits and prototyping tools
- Development experiences with Android Things, Windows 10 IoT Core, ARM Mbed OS
- Development experiences with Contiki OS, RIOT OS
- Open source IoT embedded systems
- IoT embedded systems that support 5G networks
- IoT embedded systems that support BLE, LTE-M, NB-IoT
- IoT embedded systems that support 6LowPAN, LoRa, Sigfox
- Novel IoT devices for smart homes, smart buildings, smart cities
- Novel IoT devices for health, agriculture, environment applications
- Smart wearable devices
- IoT Embedded system courses and curricula
- Instructional tools for IoT Embedded system education

Important Datelines

- Inform the Chair: As soon as you decided to contribute

Submission; ~~August 1~~ **October 5**

Notification: ~~September 4~~ **October 20**

Registration: ~~September 15~~ **October 30**

Camera-ready: ~~September 25~~ **October 30**

Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]

- Short papers (work in progress) [in the proceedings, digital library]

- Posters: two pages [in the proceedings, digital library]

- Posters: slide only [slide-deck posted on www.iaria.org]

- Presentations: slide only [slide-deck posted on www.iaria.org]

- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <http://www.iaria.org/format.html>

- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>

- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>

- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

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