Call for Contributions

Submission:
1. Inform the Chair: with the Title of your Contribution
2. Submission URL:
Please select Track Preference as **SmartCoNet**

Special track

SmartCoNet: Machine Learning Applications for Smart Collaborative Networks

Chair and Coordinator

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along with

The Internet of Things is now booming; and it drives the research and the industry to a great revolution in the design and the operation of collaborative networks to support various novel services and applications in different fields. Collaborative networks nowadays comprise intelligent heterogeneous communicating Internet-enabled entities and machines that generate massive amounts of high dimensional data. Accordingly, a set of challenges are emerging and expanding in different domains, including efficient analysis of big data, meeting QoS requirements heterogeneity of running applications and services, and mitigating threats and attacks on the cyber and the hardware levels. So, future collaborative networks and related entities and machines have to be smart via embedding them with efficient intelligent techniques for data analytics, data patterns learning, and decision making.

The science of machine learning plays a key role in designing and building smart collaborative networking that employs a wide range of machine learning algorithms with different capabilities and complexity. Machine learning can be applied to collaborative networks at data and control planes crossing various operating protocol layers ranging from the physical layer (smart chips and networks on chip), the MAC layer (smart channel access techniques), the network layer (intelligent collaborative data routing techniques), the transport layer (intelligent collaborative flow and congestion control mechanisms), and the application layer (smart applications and intelligent techniques for collaborative QoS-oriented data analysis and decision making, and computing).

The purpose of the special track is to examine what has been accomplished so far in designing and simulating accurate light weight monolithic and hybrid machine learning algorithms for having smart collaborative networks, and for supporting various services and applications with diverse QoS requirements and policies.

Prospective authors are invited to submit original papers on topics including, but not limited to:

- Efficient machine learning models for identifying and classifying applications on different levels of granularity
- Light-weight monolithic and hybrid machine learning models for detecting and identifying malicious application behavior and attacks and classifying abnormal Internet traffic

- Efficient machine learning-based big data analytics for optimized control of collaborative cyber physical systems
- Near optimum machine learning models for assessment and compression of different data types for reliable collaborative data routing, communication and computing
- Light-weight monolithic and hybrid machine learning models for enhanced networking operations in wireless collaborative networks

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: ~~March 7, 2018~~ April 28, 2018
- Notification: ~~April 7, 2018~~ May 20, 2018
- Registration: ~~April 21, 2018~~ May 30, 2018
- Camera ready: ~~May 2, 2018~~ May 30, 2018

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.iaria.org/registration.html

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