Call for Contributions

Submission:
1. Inform the Chair: with the Title of your Contribution
2. Submission URL:
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICN+2018+Special
Please select Track Preference as **MLWN**

<div align="center">

Special track

MLWN: Machine Learning Aided Approaches for Next-Generation Wireless Networks

Chair and Coordinator
Jingjing Wang, Tsinghua University, China wang-jj14@mails.tsinghua.edu.cn

Co-Chairs:
Zhongxiang Wei, University of Liverpool, UK hszwei@liv.ac.uk
Hongyang Li, The Chinese University of Hong Kong, Hong Kong, China yangli@ee.cuhk.edu.hk

along with

ICN 2018, The Seventeenth International Conference on Networks
April 22, 2018 to April 26, 2018 - Athens, Greece
http://www.iaria.org/conferences2018/ICN18.html

</div>

Next-generation wireless networks are expected to support extremely high data rates and radically new applications, which require a new wireless radio technology paradigm. The challenge is that of assisting the radio in intelligent adaptive learning and decision making, so that the diverse requirements of next-generation wireless networks can be satisfied.

Machine learning, including deep learning is one of the most promising artificial intelligence tools, conceived to support smart radio terminals. Specifically, future smart mobile terminals are expected to autonomously access the most meritorious spectral bands with the aid of sophisticated spectral efficiency learning and inference, in order to control the transmission power, while relying on energy efficiency learning/inference and simultaneously adjusting the transmission protocols with the aid of quality of service learning/inference.

This special track has the objective of bringing the above vision closer to reality and will provide a comprehensive overview of the state-of-the-art machine learning aided approaches for next-generation wireless networks.

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

- Machine learning assisted 5G networks;
- Machine learning approaches in cognitive radios and radar networks;
- Machine learning aided signal processing for massive MIMOs;
- Machine learning based resource allocation schemes in heterogeneous networks;
- Machine learning for device-to-device networks;
- Machine learning aided network association mechanism for femto/small cells;
- Machine learning based decision-making algorithms in social networks;
- Machine learning for smart grids;

- Network security and privacy relying on machine learning algorithms.

Important Datelines

- Inform the Chairs: As soon as you decided to contribute
- Submission: ~~January 17, 2018~~ February 28, 2018
- Notification: ~~February 22, 2018~~ March 5, 2018
- Registration: ~~March 8, 2018~~ March 10, 2018
- Camera ready: ~~March 15, 2018~~ March 20, 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
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICN+2018+Special
Please select Track Preference as **MLWN**

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

Contacts
Chair: Jingjing Wang, wang-jj14@mails.tsinghua.edu.cn
ICN logistics: steve@iaria.org