



CALL FOR PAPERS

Special Session

Machine Learning for Wireless Networks

Organizer

Yansha Deng, *King's College London, UK*

Machine learning and data driven approaches have recently received much attention as a key enabler for future 5G and beyond wireless networks. Yet, the evolution towards learning-based data driven networks is still in its infancy, and much of the realization of the promised benefits requires thorough research and development. Fundamental questions remain as to where and how ML can really complement the well-established, well-tested communication systems designed over the last 4 decades. Moreover, adaptation of machine learning methods is likely needed to realize their full potential in the wireless context. This is particularly challenging for the lower layers of the protocol stack, where the constraints, problem formulation, and even the objectives may fundamentally differ from the typical scenarios to which machine learning has been successfully applied in recent years. In order to address these problems, the issue solicits original research papers that address the following non-exhaustive list of topics:

- Network architecture and optimization for AI/ML applications at scale
- Machine learning for multimedia networking
- Resource allocation for shared/virtualized networks using machine learning
- Protocol design and optimization using machine learning
- AI/ML for wireless network resource management and medium access control
- Energy-efficient network operations via AI/ML algorithms
- Reliability, robustness and safety for networks optimized and operated based on AI techniques
- Security concepts for networks optimized and operated based on AI/ML concepts
- AI/ML Algorithms for network security

IMPORTANT DATES

Special sessions submission deadline: ~~January 21, 2020~~
February 17, 2020 (Final)

Acceptance notification : March 16, 2020

Camera-ready deadline : March 30, 2020

More Info <http://ict-20.org>

SUBMISSION GUIDELINES

Acceptance will be based on full paper. Prospective authors are invited to submit high-quality original technical papers **following the rules of the Main Track**. All presented papers will be published in **ICT 2020 Proceedings** and **submitted to IEEE Xplore**.

Submit your paper to: <https://edas.info/N26920>

EXECUTIVE CO-CHAIRS

Achmad Munir, Institut Teknologi Bandung, Indonesia
Indra Hartarto Tambunan, Institut Teknologi Del, Indonesia

TPC CO-CHAIRS

Tutun Juhana, Institut Teknologi Bandung, Indonesia
Oliver Holland, AWTG Limited, UK
Fu-Chun Zheng, Harbin Institute of Technology, China

ICT CO-FOUNDERS

Hamid Aghvami, King's College London, UK
Farokh Marvasti, Sharif University of Technology, Iran

