IEEE ICC™ 2018
IEEE International Conference on Communications
Communications for Connecting Humanity

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Workshop on Promises and Challenges of Machine Learning in Communication Networks

Workshop Co-Chairs

- **Paul de Kerret,** *EURECOM, paul.dekerret@eurecom.fr*
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Paper Submission Deadline

January 3, 2018

Scope of the Workshop

Machine learning is among the most active research fields today, and much can be expected from its successful application to communication networks. Yet, transforming this expectation into reality requires significant research efforts and interactions across the communications and machine learning research communities in order to overcome a number of technical obstacles. This workshop will be devoted to the presentation of pioneering works targeting applications of machine learning methods in communication network problems, with the goal of reaching a better understanding of the potential achievements that can be expected. Additionally, contributions to the field of machine learning itself, building on existing methods from the fields of communication, signal processing, and information theory will also be discussed. Topics of interest may include, but are not limited to the following:

- Deep learning for communication networks and coding
- Deep reinforcement learning for communications networks and coding
- Pattern recognition and classification for wireless networks and coding
- Machine learning for network slicing optimization
- Machine learning for 5G system and PHY/MAC optimization (massive MIMO, mmWave,...)
- Machine learning for user behavior prediction in communication networks
- New innovative machine learning methods related to communication networks and coding
- Progresses in partially supervised learning methods in communication networks and coding
- Performance analysis of machine learning algorithms in communication networks and coding

Keynote Speaker: Nikos Sidiropoulos (University of Virginia)

Accepted papers will be published on IEEE Explore. All requirements for the submitted and final papers are the same as for the regular symposium papers, and can be found online at:

http://icc2018.ieee-icc.org/authors/call-symposium-papers

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