Call for papers: Special Issue for Journal of High Speed Networks by IOS press

Journal of High Speed Networks (JHSN)

Editor-in-Chief: Francesco Palmieri

https://www.iospress.nl/journal/journal-of-high-speed-networks/

Special Issue on **"Machine Learning and Data Analytics for Communication Networks in the 5G Era"**

The next generation (5G) of communication networks will target unprecedented performance, in terms of network capacity, Quality of Service, network availability, user-experience, etc. In this context, the cloud computing and Network Function Virtualization (NFV) paradigms, together with the support of optical networking, play key roles, which are expected to enable 5G networking. Advanced mathematical tools, such as those in the field of Machine Learning (ML) and Big Data Analytics, also represent an extremely important opportunity to help telecom operators with the design, operation and maintenance of their networks, especially if considering the continuous increase in network complexity. As a matter of fact, thanks to the possibility of efficiently leveraging large amounts of data, ML tools are expected to improve 5G networks through automation and self-optimization.

The scope of this Special Issue is on the most recent applications of ML and Big Data Analytics on the design and operation of next-generation networks.

Topics of Interest include, but not limited to:

• Use of ML and data analytics in the Cloud, Mobile Edge Computing and Data Center Networks

• Network Function Virtualization and Service Function Chaining with ML

• Network telemetry, monitoring and data collection

• Applications of ML to next-generation wired/wireless networks

• ML for 5G-services traffic classification and forecast

• Resource allocation using ML

• Cross-layer network optimization with ML

• Failure prediction, detection and management with ML

• Reinforcement learning for network control

Instructions for Manuscripts

Submitted articles must describe original research which has not been published and is not currently under review by other journals or conferences. Manuscripts must be prepared according to the usual standards for submission to JHSN; see the Information for Authors in: http://www.iospress.nl/journal/journal-of-high-speed-networks/. Manuscripts must also be uploaded through JHSN's electronic submission system: http://mstracker.com/submit1.php?jc=jhsn by specifying Special Issue: "Machine Learning and Data Analytics for Communication Networks in the 5G Era" during the submission process. Paper submissions must confirm to the layout and format guidelines in the Journal of High Speed Networks.

Important Dates:

Full paper submission deadline: 30 November 2019

Revised submission due date: 30 January 2020

Final decision: 30 March 2020

Publication: May 2020

Guest Editors:

1.Thomas Martinetz, University of Lübeck, Germany**, [Managing Guest Editor]**

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