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SPECIAL ISSUE ON
Machine Learning and Intelligent Communications

Overview:

Along with the fast developing of mobile communications technologies, an amount of high quality wireless services is required and increasing exponentially. According to the prediction of Cisco VNI Mobile Forecast 2017, Global mobile data traffic will increase sevenfold between 2016 and 2021, and mobile network connection speeds will increase threefold to 20.4 megabits per second (Mbps) by 2021. Hence, there is still a big gap between the future requirements and current communications technologies, even using 4G/5G. It motivates the researchers to improve the system performance by integrating the limited wireless resources with some intelligent algorithms/schemes.

As an emerging discipline, machine learning is a subfield of computer science that evolved from the study of pattern recognition and computational learning theory in artificial intelligence, and explores the study and construction of algorithms that can learn from and make predictions on complicated scenarios. In communication systems, the previous/current radio situations and communication paradigms should be well considered to obtain a high quality of service (QoS), such as available spectrum, limited energy, antenna configurations, and heterogeneous properties. Machine learning algorithms facilitate complicated scenarios analysis and prediction, and thus can make optimal actions in OSI seven layers. We hope that integrating machine learning algorithms into communication systems will improve the QoS and make the systems smart, intelligent, and efficient. Thus, the time is now for searching for potential intelligent solutions applied to future mobile communications and networks.

This Special Issue targets to explore intelligent/machine-learning algorithms for mobile communication networking systems. Expected contributions call upon a wide range of novel modeling as well as algorithmic and computational frameworks related to intelligent optimization or machine learning. This special issue welcomes the papers from all the areas which are related to mobile communication networking systems.

Topics

Topics of interest include, but are not limited to, the following scope:

<ul style="list-style-type: none">- Intelligent cloud-support communications- Intelligent software defined flexible radios- Intelligent cooperative networks- Intelligent cooperative/distributed coding- Intelligent wireless communications- Intelligent wireless sensor networks- Intelligent satellite communications- Machine learning for multimedia- Machine learning for IoT- Data mining in heterogeneous networks	<ul style="list-style-type: none">- Intelligent spectrum (or resource block) allocation schemes- Intelligent energy-aware/green communications- Intelligent antennas design and dynamic configuration- Intelligent Massive MIMO communication systems- Intelligent positioning and navigation systems- Intelligent underwater sensor networks- Machine learning algorithm & cognitive
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	radio networks – Machine learning and information processing in wireless sensor networks – Decentralized learning for wireless communication systems
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Important Dates

- **Manuscript submission deadline: 1 June, 2018**
- Notification of acceptance: **1 August, 2018**
- Submission of final revised paper: **1 September, 2018**
- Publication of special issue (tentative): **Fourth Quarter, 2018**

Submission Procedure

Authors should follow the MONET Journal manuscript format described at the journal site. Manuscripts should be submitted on-line through <http://www.editorialmanager.com/mone/>. A copy of the manuscript should also be emailed to the Guest Editors at the following email addresses.

Guest Editors:

Dr. Li Ping Qian, Zhejiang University of Technology, China, Email: lpqian@zjut.edu.cn

Dr. Shuai Han, Harbin Institute of Technology, China Email: hanshuai@hit.edu.cn

Dr. Bo Ji, Temple University, USA, Email: boji@temple.edu

Dr. Yan Zhang, University of Oslo, Norway, Email: yanzhang@ieee.org



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