Machine Learning for Intelligent Wireless Communications and Networking

While emerging wireless applications require massive devices with real-time communication, computation, management and control, the growing complexity of wireless communications and networking has made monitoring the multitude of elements intractable. As a result, embedding versatile machine intelligence into future wireless systems has aroused widespread concern in academia and industry. This trend is reflected in machine learning-based intelligent solutions, where a natural step is to learn optimal decisions in a proactive manner. Based on network measurement and user behavior data, a variety of learning techniques, such as deep learning, transfer learning and reinforcement learning play a significant role in the wireless networking area.

Artificial intelligence and machine learning facilitate complicated wireless scenarios analysis and prediction, and thus to make an optimal decision. We hope to incorporate artificial intelligence and machine learning algorithms into wireless communications and networking systems, aimed at improving QoS/QoE and make the systems smart, intelligent, and efficient. This special issue focuses on recent advances in architecture, algorithms, optimization, and models for intelligent wireless communications and networking. Original, unpublished contributions and invited articles, reflecting various aspects are encouraged. The topics of interest for the special issue include, but are not limited to:

- Machine learning for QoS/QoE provisioning in wireless networks
- Machine learning for wireless and mobile multimedia applications
- Machine learning for resource allocation in virtualized wireless networks
- Machine learning for location based services
- Machine learning for privacy-preserving and security issues in wireless networks
- Machine learning for mobile crowd sensing
- Machine learning for Wireless Rechargeable Sensor Network
- Incentive for crowd sensing enabled machine learning systems
- Machine learning for cognitive radio networks
- Machine learning for wireless sensor networks
- Fog/edge computing enabled intelligent systems
- Machine learning for IoT
- Intelligent spectrum allocation
- Intelligent software defined wireless networks
- Intelligent cloud/fog-assisted wireless communications

- Intelligent cooperative Wireless safety charging networks

- Intelligent antennas design and dynamic configuration

- Intelligent Massive MIMO communication systems

- Intelligent positioning techniques

- Data mining in heterogeneous wireless networks

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The authors can directly submit their papers at: https://www.editorialmanager.com/ante/ and must select the menu "Choose Article Type" and then the item "CfP: Machine Learning for Intelligent Wireless Communications and Networking".

Proposed schedule

- **Manuscript submission**   June 30, 2019
- **Notification**   September 31, 2019
- **Online with DOI**   As soon as accepted
- **Printed issue**   Early 2020