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CALL FOR PAPERS

IEEE Transactions on Big Data

Special Issue on Wireless Big Data

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Big data, which has been ushered from the exponential growth in different commercial areas, has profoundly changed the way we live and received considerable attentions in various applications, such as distribute computing, e-health, intelligent transportation system, wireless sensor network, etc. In the meantime, the emerging 5G and Internet-of-Things (IoT) have been expected to include a bunch of new requirements, applications and scenarios. These new directions bring a dramatic increase in the amount and type of data. To some extent, wireless communications are heading into a new era of big data. Therefore, understanding the vast amount of data residing in wireless systems can greatly facilitate better network design and optimization, which benefits equipment vendors and operators alike.

In this special issue, we solicit high-quality research articles addressing key challenges and state-of-the-art solutions on how wireless big data analytics could improve the wireless technologies in various scenarios. Topics of interest include, but are not limited to:

- Novel applications and services based on wireless big data
- Wireless big data in 5G and beyond wireless network
- Wireless big data for fog computing/edge computing/cloud computing
- Design of hardware and software for wireless big data acquisition
- Parallel channel sounding system with wireless big data processing
- Development of channel sounder for high frequency and Massive MIMO
- Wireless big data for software defined networking
- Wireless big data for information-centric networking
- Wireless big data enabled channel measurement and simulation
- Software defined radio based technologies for wireless big data
- Wireless big data for vehicular technology, VANET, and ITS
- New theory and channel models of wireless technologies for big data
- Security and privacy for wireless big data
- Signal and information processing for wireless big data
- Wireless big data for cloud radio access networks
- Channel measurement and modelling for Massive MIMO
- Efficient channel estimation algorithms for wireless big data processing.
- Wireless big data for Millimetre wave and THz terrestrial and satellite communications
- Wireless big data based channel measurement and modelling in high mobility scenarios
- Wireless big data analysis for IoT
- Performance metrics and measuring methods for wireless big data

Submission Instructions

Before submitting your manuscript, please ensure you have carefully read the Instructions for Authors for IEEE Transactions on Big Data (TBD) (https://www.computer.org/web/tbd/author). The complete manuscript should be submitted through TBD's submission system (https://www.computer.org/web/tbd/author). To ensure that you submit to the correct special issue, please select the appropriate section in the dropdown menu upon submission. In your cover letter, please also clearly mention the title of the SI.

Important Dates

- 08/31/2017 Paper submission due
- 10/01/2017 1st round review due
- 12/01/2017 1st revision due
- 01/01/2018 2nd round review due
- 02/01/2018 2nd revision due
- 03/01/2018 Final due

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