

INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS

John Wiley & Sons, Ltd.

Editor in Chief: Mohammad S. Obaidat, Fellow of IEEE

Impact Factor: 1.099

CALL FOR PAPERS

Special Issue on Big Data Intelligence in Communication Systems

Scope

With the development of communication systems, e.g., mobile, Internet and telecommunication systems, a large volume of data in various formats is collected much easier than before. As thus, it is more common than ever to deal with large datasets to realize the intelligence of these public communication systems. However, with the advent of wireless sensor networks, social networks, smart tools and the Internet, data with heterogeneity, high-volume and low-quality is generated rapidly, which makes it harder to gather, transfer, store and fuse the data as well as analyse the behaviours of the systems, e.g., security anomalies detection or future demands prediction. Fortunately, intelligent techniques, together with the advances in big data and high-performance computing power, called Big Data Intelligence, can harness the immense stream of operational data from these systems, and can perform analytics processing to improve its usability, effectiveness and efficiency, which offers us big opportunities and transformative potential for intelligent decisions and predictive services. Extensive attention has been captured recently to improve operations and managements for communication systems by employing the intelligence of big data. This will not only provide a comprehensive understanding and a promising decision-making framework based on massive data, but also give opportunities to design novel algorithms and platforms for its management and analytics. Therefore, the purpose of this special issue is to collect the state-of-the-art works on the latest development of big data intelligence in communication systems, which include related surveys, algorithms, platforms, systems and applications.

Proposed submissions should be original, unpublished, and novel for in-depth research. Topics of interest for this special issue include, but not limited to:

- Innovative methods for big data analytics
- Optimization techniques for big data analytics
- Domain adaption for cross-domain learning
- Multimodal data fusion
- Deep learning and reinforcement learning
- Batch, real-time, and batch-real-time models for big data analytics
- Parallel, accelerated, and distributed algorithms and frameworks for communication systems
- Mining of unstructured, spatio-temporal and multimedia data
- Novel hardware and software architectures for big data
- Design and modelling of intelligent communication systems
- Cloud and network analytics in communication systems
- Anomaly detection and prediction in communication systems
- Security, privacy and trust in communication systems
- Visualization platforms applications in communication systems

Instructions for Manuscripts

Submitted articles must describe original research which have not been published or currently under review by other journals or conferences. Submissions must be directly sent via the IJCS submission web site at <http://mc.manuscriptcentral.com/ijcs> and select Special Issue: Big Data Intelligence in Communication Systems as manuscript type during step 1 of the submission process.

Paper submissions must conform to the layout and format guidelines in the International Journal of Communication Systems. Instructions for Contributors are in:

<http://www3.interscience.wiley.com/journal/5996/home/ForAuthors.html>

Important Dates

Manuscript Due: 1 September 2017
Decision Notification: 1 November 2017
Final Manuscript Due: 1 December 2017
Tentative Publication Date: February 2018

Guest Editors

Prof. Zhikui Chen, Dalian University of Technology, China, Email: zkchen@dlut.edu.cn

Prof. Laurence T. Yang, St. Francis Xavier University, Canada, Email: ltyang@gmail.com

Prof. Petros Nicopolitidis, Aristotle University of Thessaloniki, Greece, Email: petros@csd.auth.gr