# Peer-to-Peer Networking and Applications

*~Special Issue Call for Papers~*

## "Special Issue on Big data and smart computing in network systems"


### GUEST EDITORS

**Jiming Chen** (jmchen@ieee.org), Zhejiang University, China
**Kaoru Ota** (ota@csse.muroran-it.ac.jp), Muroran Institute of Technology, Japan
**Lu Wang** (wanglu@szu.edu.cn), Shenzhen University, China
**Jianping He** (jphe@sjtu.edu.cn), Shanghai Jiaotong University, China


*Peer-to-Peer Networking and Applications* invites papers for a special issue on "Big data and smart computing in network systems."

### SCOPE

In recent years, big data and smart computing are emerging research fields that have recently drawn much attention from computer science, communication and control area and information technology as well as from social sciences and other disciplines.

With the increasing deployment of new monitoring and sensing devices, and the advanced measurement infrastructures, a large amount of data is collected in network systems. Network systems have become data-driven, which call for big data and smart computing methods and solutions (e.g., predictive data mining, robust data analytics, artificial intelligence, distributed and high-performance computing, efficient data management, privacy-preserving data publishing, etc.). With the growing volume, speed and types of big data from the network systems, smart computing is imperative to guarantee critical functionalities in network systems, such as real-time wide-area situational awareness, dynamic data management, efficiency optimization and control, robust network performance, etc. The focus of this special issue is on the improvement of network systems operations and applications with emphasis on big data and smart computing technologies. We solicit and publish original research papers on the theories, algorithms, and methodologies that highlight emerging data processing technologies for big data and smart computing.

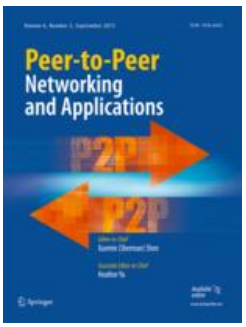
### SUBJECT COVERAGE

Topics in (but not limited to) the following areas are welcome:

- New P2P communication architectures for big data and smart computing
- Techniques, models and algorithms for big data in network systems
- Big data processing approaches for P2P communication networks
- Data mining, graph mining and data science
- Networked infrastructure and platform for smart computing
- Big data analytics and social media
- Hardware/software infrastructure for big data
- Data-driven distributed optimization and control
- Machine learning and AI for big data and smart computing
- Web search and information retrieval
- Models and tools for smart computing in network systems
- Smart computing technologies for P2P communication networks
- Cloud and grid computing for big data
- Security and privacy theory and algorithm for big data

### PAPER SUBMISSION:

- Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.
- All papers will be reviewed following standard reviewing procedures for the Journal.
- Papers must be prepared in accordance with the Journal guidelines: http://www.springer.com/12083
  - Submit manuscripts to: http://PPNA.edmgr.com. Choose **"Big data and smart computing"** as the article type.

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## NOTES FOR PROSPECTIVE AUTHORS

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper has been completely re-written and if appropriate written permissions have been obtained from any copyright holders of the original paper). All papers are refereed through a peer review process.

*This special issue will publish as a topical collection, linking all papers to the virtual online issue immediately via article links and an identifying tag.*

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## IMPORTANT DATES

- **Paper submissions: May 1, 2018**
- **Author notification: July 2018**
- **Expected publication: November 2018**

## GUEST EDITOR BIOS

Jiming Chen received B.Sc degree and Ph.D degree both in Control Science and Engineering from Zhejiang University. He was a visiting researcher at University of Waterloo from 2008 to 2010. Currently, he is a Changjiang Chair professor with College of control science and engineering, and deputy director of the State Key laboratory of Industrial Control Technology at Zhejiang University, China. He serves/served associate editors for several international Journals including IEEE TII, IEEE TPDS, ACM TECS, etc. His research interests include sensor networks, IoT, networked control, cyber security. He is a Distinguished lecturer of IEEE Vehicular Technology Society 2015-2018

Kaoru Ota was born in Aizu-Wakamatsu, Japan. She received M.S. degree in Computer Science from Oklahoma State University, USA in 2008, B.S. and Ph.D. degrees in Computer Science and Engineering from The University of Aizu, Japan in 2006, 2012, respectively. She is currently an Assistant Professor with Department of Information and Electronic Engineering, Muroran Institute of Technology, Japan. From March 2010 to March 2011, she was a visiting scholar at University of Waterloo, Canada. Also she was a Japan Society of the Promotion of Science (JSPS) research fellow with Kato-Nishiyama Lab at Graduate School of Information Sciences at Tohoku University, Japan from April 2012 to April 2013. Her research interests include Wireless Networks, Cloud Computing, and Cyber-physical Systems. Dr. Ota has received best paper awards from ICA3PP 2014, GPC 2015, IEEE DASC 2015, IEEE VTC 2016-Fall, FCST 2017 and IET Communications 2017. She is an editor of IEEE Transactions on Vehicular Technology (TVT), IEEE Communications Letters, Peer-to-Peer Networking and Applications (Springer), Ad Hoc & Sensor Wireless Networks, International Journal of Embedded Systems (Inderscience) and Smart Technologies for Emergency Response & Disaster Management (IGI Global), as well as a guest editor of ACM Transactions on Multimedia Computing, Communications and Applications (leading), IEEE Communications Magazine, IEEE Network, etc. Also she was a guest editor of IEEE Wireless Communications (2015), IEICE Transactions on Information and Systems (2014), and Ad Hoc & Sensor Wireless Networks (Old City Publishing) (2014). She was a research scientist with A3 Foresight Program (2011-2016) funded by Japan Society for the Promotion of Sciences (JSPS), NSFC of China, and NRF of Korea. She is the recipient of IEEE TCSC Early Career Award 2017.

Lu Wang received the B.S. degree in communication engineering from Nankai University, Tianjin, China, in 2009, and the Ph.D. degree in computer science and engineering from Hong Kong University of Science and Technology, Hong Kong, in 2014. She is currently an Assistant Professor with the College of Computer Science and Software Engineering, Shenzhen University, Shenzhen, China. She was the recipient of the Best Paper Awards at IEEE Globecom 2012, IEEE ICPADS 2012 and MSN 2016. Her research interests include wireless networks, IoT and mobile computing.

Jianping He is currently an associate professor in the Department of Automation at Shanghai Jiao Tong University. He received the Ph.D. degree in Control Science and Engineering from Zhejiang University in 2013. He worked as a research fellow in Communication Networks Lab (CNLAB) at University of Victoria from 2014 to 2017. His research interests include

the sensor networks, VANETs, distributed privacy and security, and distributed control and optimization. He served as an associate editor for a special issue on Consensus-based Applications in Networked Systems in the International Journal of Robust and Nonlinear Control in 2016.