Special Issue on “Advances in Big-Data based mHealth Theories and Applications”

The past decade has seen rapid development in mobile technologies. The emergence of a great number of mobile devices has accelerated the arrival of a big-data era. Now the concept of big data is permeating throughout the entire Internet industry and endowing the traditional healthcare with new trends and new characteristics such as mobility, intelligence and convenience, which has given birth to a “mobile health (mHealth)” pattern.

In this mHealth environment, tasks like motion recognition and health monitoring of patients, information exchange between doctors and patients, intelligent diagnosis and information push, etc., can be automatically and rapidly accomplished by analyzing a large number of data collected from various mobile devices. However, the huge amounts of data generated by mHealth monitoring and healthcare transactions are too voluminous and complex to be processed by traditional methods. Advances in big-data technologies may provide promising solutions to transform these mounds of data into useful information and knowledge for decision making and reasoning.

This special issue aims to collect high-quality research articles in the field of big-data based mHealth Theories and applications. The issue will carry revised and substantially extended versions of selected papers presented in the International Conference on Identification, Information and Knowledge in the Internet of Things 2015 (IIKI 2015). However, we also strongly encourage researchers unable to participate in the conference to submit articles for this call.

Subject Coverage:

Suitable topics include but are not limited to the following:

- Advanced data mining technologies for mHealth
- Machine learning/Deep learning applications in mHealth
- Smart phone/wearable device based human motion recognition
- Ubiquitous computing in personal health monitoring/architectural structure health monitoring
- Emerging wireless/mobile applications in mHealth
- Wireless telemedicine and e-health services

Deadlines and Guidelines:

Papers must be written in English and describe original research which is not published nor currently under review by other journals or conferences. Author guidelines for preparation of manuscript can be found at:
To submit, please go to [http://www.editorialmanager.com/joms](http://www.editorialmanager.com/joms) and choose the Article Type "SI: Advances in Big-Data based mHealth Theories and Applications”

All submissions will be reviewed according to the journal peer-review policy. The planned calendar is as follows:

- **Manuscript Submission Deadline:** December 1, 2015
- **Notification to authors:** January 15, 2016
- **Revision due:** February 15, 2016
- **Notification of Final Acceptance:** April 1, 2016
- **Publication:** mid-late 2016

**Guest Editors:**

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**Yunchuan Sun** is currently an Associate Professor in Beijing Normal University, Beijing, China. He acts as the Secretary of the IEEE Communications Society Technical Subcommittee for the Internet of Things from Jan. 2013. He also acts as Associate Editor of the Springer journal Personal and Ubiquitous Computing since Jan. 2012. He received his PhD in 2009 from the Institute of Computing Technology, Chinese Academy of Science, Beijing, China. His research interests include internet of things, semantic link network, big data modeling and representation, event-linked network, information security.

**Houbing Song** received the Ph.D. degree in electrical engineering from the University of Virginia, Charlottesville, VA, in 2012. In 2012, he joined the Department of Electrical and Computer Engineering, West Virginia University, Montgomery, WV, where he is currently an Assistant Professor and the founding director of both the West Virginia Center of Excellence for Cyber-Physical Systems (WVCECPS) sponsored by the West Virginia Higher Education Policy
Commission and the Security and Optimization for Networked Globe Laboratory (SONG Lab). He worked with the Texas A&M Transportation Institute (TTI), Texas A&M University, as an Engineering Research Associate in 2007. His research interests lie in the areas of cyber-physical systems, internet of things, connected vehicles, wireless communications and networking, optical communications and networking, smart grid communications and networking, and body sensor networks. Dr. Song’s research has been supported by the West Virginia Higher Education Policy Commission. Dr. Song is a senior member of IEEE and a member of ACM. Dr. Song has been the associate editor-in-chief of the blue book series in internet of things since 2011. Dr. Song has served on the technical program committee for numerous international conferences. Dr. Song was the general chair of 5 international workshops. Dr. Song is an area editor or associate editor for several international journals and a guest editor of 4 special issues. Dr. Song has published more than 40 academic papers in peer-reviewed international journals and conferences.