

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

Journal: Journal of Medical Systems

The past decade has seen rapid development in mobile technologies. The emergence of a great number of mobile devices (e.g. smart phones, wearable sensors) 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.

Topics

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

Timeliness

Manuscript Due: December 1, 2015

First Decision Due: January 15, 2016

First Revision Due: February 15, 2016

Final Decision Date: April 1, 2016

Publication in mid-late 2016

Guest Editors

Dr. Junqi Guo, Beijing Normal University, guojunqi@bnu.edu.cn

Yunchuan Sun, Beijing Normal University, yunch@bnu.edu.cn

Houbing Song, West Virginia University, h.song@ieee.org