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Special Session on

"5G and Beyond Mobile Technologies and Applications For IoT"

Organized by

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Call for Papers

Following the tremendous success of 2G and 3G mobile networks and the fast growth of 4G, the next generation mobile networks (5G) was proposed aiming to provide infinite networking capability to mobile users. Differentiated from 4G, benefits offered by 5G is much more than the increased maximum throughput. It aims to involve and benefit from many current technical advances including Internet of Things (IoT).

As the IoT integrates many heterogeneous networks, such as Wireless Sensor Networks (WSNs), Wireless Local Area Networks (WLANs), Mobile Communication Networks (3G/4G/LTE/5G), Wireless Mesh Networks (WMNs) and wearable health care systems, it is critical to design self-organizing and smart protocols for heterogeneous ad hoc networks in various IoT applications, such

as cyber-physical systems, cloud computing for heterogeneous ad hoc networks, large-scale sensor networks, data acquisition from distributed smart devices, green communication and applications, environmental monitoring and control, etc.

Moreover, based on the survey conducted by the World Health Organization, the world will lack 12.9 million health care workers by 2035. Hence, it is important to develop wearable health care systems to perform self health monitoring. In general, wearable health care systems demands low power consumption and high measurement accuracy. Smart technologies including green electronics, green radios, fuzzy neural approaches and intelligent signal processing techniques play important roles for the developments of the wearable health care systems.

This special issue aims at providing a forum to discuss the recent advances on 5G and beyond mobile technologies and applications for IoT. Topics of interest in this special issue include, but are not limited to

Topics of interest include, but are not limited to:

- 4G/5G technological platforms, protocols and applications for IoT.
- WiFi /LTE-U for health care system
- Wearable blood glucose measurement systems
- Green electronics for wearable health care systems
- Smart power control techniques for advanced mobile systems
- Software techniques for mobile systems
- MIMO, Beamforming techniques for 4G/5G and beyond
- Power amplifiers, antenna, RF front end, coding, DSP techniques for 4G/5G
- Channel propagation model for advanced mobile telephony
- Smart mobile communication techniques for health care systems, energy, logistics
- Smart mobile measurement techniques for IoT applications

Note: Selected good quality papers will be considered for publication in IEEE Transactions on Industrial Informatics subject to further rounds of review.