

2019 IEEE International Conference on Industrial Informatics (INDIN'19)

Special Session/ Organized Session on Informatics Methods for IoT-enabled Health Care

organized by

Principal Organizer: Dr Po Yang (p.yang@ljmu.ac.uk)
Affiliation: Liverpool John Moores University, UK

Organizer 1: Prof Guangjie Han (hanguangjie@hhu.edu.cn)
Affiliation: Hohai University, China

Organizer 2: Prof Yun Yang (yangyan19@hotmail.com)
Affiliation: Yunnan University, China

Call for Papers

Significant advancements in the Internet of Things (IoT) have generated extensive opportunities for innovation across both academic and industrial communities, particularly in the health care field. Due to the exponential growth of wearable devices and mobile apps, a promising trend is the exploding role of the Internet-of-Things (IoT)—transforming the traditional hubs of healthcare, such as hospitals and clinics, to personalized health care systems, especially in the mobile environment. Current research in IoT-enabled health care is highly interdisciplinary, involving methodologies from computer science, engineering, information science, behavioral science, decision science, as well as many applied areas in medicine and public health.

A promising trend in these studies is the development of sophisticated techniques that will enable: (i) Cost-effective wearable biomedical devices. (ii) A highly secured, privacy-protected and trustworthy health care system. (iii) The effective and efficient analysis of long-term health data for supporting wise clinical decision-making. Many researchers have recently accepted the assignment of IoT-enabled system architectures into a four-layer organizational structure: sensing, networking, data processing and application.

It is of great importance to study informatics methods in each layer, seeking ways to empower successfully the utility of IoT enabled technology in healthcare. Such work is associated with issues in the areas of smart sensing technologies, network communication and data mining. In the long term, innovative informatics methodologies in IoT-enabled health care will benefit the establishment and enhance the efficiency of (a) practically interoperable IoT systems for care delivery and research, (b) adequate data and knowledge standards of self-empowerment, and (c) sound clinical decision-making foundations.

The special session is soliciting original high-quality papers that deal with the development of new and generalizable methodologies and technologies that are relevant to themes:

- smart sensing technologies for IoT-enabled health care
- network communication for IoT-enabled healthcare
- Exploration and management of healthcare data derived from innovative IoT healthcare systems.
- Control theories and tools for modelling, simulating and optimizing healthcare processes

Submissions Procedure Deadlines: All the instructions for paper submission are included in the conference website <https://www.indin2019.org/>