Special Session on

Post-pandemic horizons for Internet of Medical Things: networking, security and systems design perspective on the future of Body Sensor Networks

at

11th World Congress on Information and Communication Technologies (WICT 2021)

on World Wide Web December 13-15, 2021

http://www.mirlabs.org/wict21/

Objectives and Scope

Among the different extensions of the main Internet of Things (IoT) paradigm, the Internet of Medical Things (IoMT) branch is experiencing a large interest from the scientific community. In particular, the COVID-19 pandemic brought to the attention of researchers the need of increasing the investigation focus on telemedicine and homecaring solutions in order to lighten the hospital pressure.

In this context, Body Sensor Networks (BSN) play a crucial role. In this special session we aim to explore and highlight the most important open topics regarding BSN for medical applications, starting from the core of BSN paradigm definition and grabbing novelties from a networking, security, hardware and system design point of view, always seeking for the best compromise between complexity and power consumption.

The special session accepts papers in the form of new research trends, literature surveys and state of the art reviews.

Subtopics

Topics of interest include but are not limited to:

- In-body, on-body, and around body networks;
- Home monitoring and assisted living applications;
- Wearable sensors for diagnosis and therapy;
- Pervasive health care and patient monitoring;
- COVID-19 patients home caring and monitoring through BSNs;
- Low-power electronics for sensor-equipped boards;
- Micro Electrical and Mechanical Systems (MEMS);
- Time synchronization for BSNs;
- Data integrity and storage management in BSNs;

- Heterogeneous-source data merging and information mining;
- Network infrastructures and topologies for BSNs;
- Network and PHY-layer security for IoT applications;
- Low-power communication protocols and techniques for BSNs;
- The role of 5G and beyond cellular standards in the IoMT;
- Software Defined Networking (SDN) applications for BSNs.

Paper Publications

- Proceedings will be published in Lecture Notes in Networks and Systems, Springer (Indexed in SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago) https://www.springer.com/series/15179
- Papers maximum length is 10 pages
- Papers must be formatted according to Springer format (Latex/word) available at: https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-preparation/5636#c3324

Important Dates

Paper submission due: September 30, 2021

Notification of paper acceptance: October 31, 2021

Registration and Final manuscript due: November 15, 2021

Conference: December 13-15, 2021

Special Session Chair

- Giuseppe Coviello, Polytechnic University of Bari, DEI, ETLCLAB
- Gianfranco Avitabile, Polytechnic University of Bari, DEI, ETLCLAB
- Antonello Florio, Polytechnic University of Bari, DEI, ETLCLAB

Information Contact: Giuseppe Coviello < qiuseppe.coviello@poliba.it>