JOURNAL OF MIDICAL SIGNALS & SENSORS

Journal of Medical Signals and Sensors (JMSS)

ISSN-Online: 2228-7477- Open Accses

Address: Medical Image and Signal Processing Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

Email: jmss.mui@gmail.com AND jmss@mui.ac.ir

Tel: 0098 - 31 - 3792 - 3307 HTTP: jmssjournal.net

# Special issue on Advances in Sensor Networks and Its Applications in Healthcare Systems

In recent decades, the healthcare systems have potentially transformed with various technological features to meet future demands. Global population growth demands better healthcare systems with technological advancements to fulfill the needs to a greater extent. Advancements in sensor networks are seeking attention among healthcare professionals and researchers for their unique attributes. Healthcare systems are being widely investigated globally to develop higher standards of living among the public. Thus, advanced sensor networks are being scrutinized and aids in the enhancement of healthcare sectors and for a productive life.

The essentiality of implicating advanced sensor networks for healthcare systems anticipates rapid health development and helps to meet medical demands. Advanced smart sensor networks such as Wireless Sensor Networks (WSNs) and Wireless Body Area Networks (WBANs) are found to play a crucial role in managing healthcare systems to a greater extent. Moreover, Wearable Wireless Body Area Networks (WWBANs), Wearable and Implantable Wireless Sensor Networks are also found to provide higher beneficiary trends for the development of remote healthcare applications. Moreover, these sensor networks play a crucial role in monitoring vital parameters such as blood pressure, temperature, ECG. Further, these networks also ensure telemedicine and mobile health facilities which indeed aids in the enhancement of healthcare systems across the globe. Significantly, emerging sensor networks like Wireless Medical Sensor Networks (WMSNs) are utilized to identify the activities of day-to-day life and ensures to provide data for longitudinal studies which aid in the enhancement of healthcare systems. Above all, advanced sensing technologies are identified to track patients' wellness around every

SIGNALS & SENSORS

Journal of Medical Signals and Sensors (JMSS)

ISSN-Online: 2228-7477- Open Accses

Address: Medical Image and Signal Processing Research Center,

Isfahan University of Medical Sciences, Isfahan, Iran.

Email: jmss.mui@gmail.com AND jmss@mui.ac.ir

Tel: 0098 - 31 - 3792 - 3307

HTTP: jmssjournal.net

healthcare unit and help in the development of healthcare sectors. Ongoing applications of miniaturized sensor networks are also gaining importance for their significant applications and efficient management of healthcare sectors. Emerging advanced sensors and

sensing networks possess the ability to revolutionize healthcare units to a greater extent.

However, there are many challenges and opportunities in the development of modest sensing networks to enhance the efficiency, sustainability, and safety of healthcare units. Limitations indulge security threats, data theft, inadequate knowledge on handling sensor networks, and technological failure. More probable challenges also include routing threats in WSNs; requirement of high bandwidth; high energy consumption of WSNs; complications in cross-layer design, etc. In addition, spreading greater awareness among the public about utilizing sensing technologies and their applications is considered to be more essential. Researchers and policymakers are most invited to present both theoretical and empirical research work against this context. The special issue provides various opportunities for researchers to ensure safe methodologies to implicate sensor networks and their applications in health care units.

Topics of inters:

The role of a sensor network is empowering precision medicine

Emerging trends and applications of advanced sensor networks for emerging healthcare applications

Sensor network protocols for the development of healthcare applications

Sensor network advances in healthcare systems and future challenges

• Role of wireless sensor platforms for monitoring the development of healthcare units

2

# FOURNAL OF MEDICAL SIGNALS & SENSORS

### Journal of Medical Signals and Sensors (JMSS)

ISSN-Online: 2228-7477- Open Accses

Address: Medical Image and Signal Processing Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

Email: jmss.mui@gmail.com AND jmss@mui.ac.ir

Tel: 0098 - 31 - 3792 - 3307 HTTP: jmssjournal.net

- Technical challenges and objectives in wireless sensor networks
- Healthcare applications and the technological implied medical resources
- · Frontiers and applications of smart sensor networks for health care units
- · Development of remote healthcare wireless sensor network for sustainable healthcare units
- · Applications of wireless sensor networks in the enhancement of both urban and rural healthcare sectors

# Important Dates:

✓ Submission: 10 June, 2023

✓ First decision: 30 Sept. 2023

✓ Revision and resubmission deadline: 10 Dec. 2023

✓ Paper acceptance: 20 Feb. 2024

## Guest Editors:

### Dr.Salim El Khediri

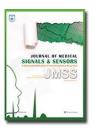
**Assistant Professor**,

**Department of Information Technology,** 

Qassim University, Buraydah, Saudi Arabia

Email: s.elkhediri@qu.edu.sa, s.elkhediri.work@qmail.com

Google Scholar: https://scholar.google.fr/citations?user=nI7VFWIAAAAJ&hl=fr



Journal of Medical Signals and Sensors (JMSS)

ISSN-Online: 2228-7477- Open Accses

Address: Medical Image and Signal Processing Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

Email: jmss.mui@gmail.com AND jmss@mui.ac.ir

Tel: 0098 - 31 - 3792 - 3307 HTTP: jmssjournal.net

### **Dr.Virginia Pilloni**

Assistant Professor

Department of Electrical and Electronic Engineering,
University of Cagliari,
Cagliari, 09123, Sardinia, Italy

Email: virginia.pilloni@unica.it

Google Scholar: https://scholar.google.it/citations?user=Bb0s 7wAAAAJ&hl=it

### **Dr.Mohamed Lahby**

Associate Professor

Hassan II University ENS Casablanca,

Casablanca, Morocco Email: <a href="mailto:lahby@ieee.org">lahby@ieee.org</a>

Google Scholar: https://scholar.google.it/citations?user=XgAokNoAAAAJ&hl=it

The authors should register in <a href="https://review.jow.medknow.com/jmss">https://review.jow.medknow.com/jmss</a> to submit their work to JMSS. It's a self-explanatory and simple two-step process.

**NOTE:** Authors should mention in the cover letter which special issue their article is related to.