CALL FOR PAPERS
IEEE Journal of Selected Areas in Sensors Special Section on:

**Bio-Remote Sensing and Integrated
Embedded Artificial Intelligence
Systems**

The aim of this focus session is to provide a platform for research scientists, engineers, and practitioners across the globe, both from academia and industry, to showcase their recent research outcomes, concepts, and practical applications in the domains of Bio-remote sensing technology of human vital signs and data analysis within the integrated system technology. Additionally, this novel special section will facilitate a chance for researchers to present their latest research findings or ideas in both theoretical and practical domains of remote sensing, signal processing, computer vision, sensors & actuators, focusing on measuring human vital signs in emerging medical technology, which is further supported by the embedded system, artificial intelligence and more.

The IEEE Journal of Selected Area in Sensors will pave the way for Bio-Remote sensing and measuring using embedded and integrated systems, with an extensive range of topics including novel technologies and algorithms for signal processing, remote sensing and measuring, wireless communication, integrated sensor fusion network, Thermal Imaging, Computer Vision, etc. This special issue will also welcome challenges in embedded number crunching, power consumption, parallel processing, and grid computing. All of these topics will be explored through the lens of fully integrated real-time technologies and knowledge domains at both the hardware and software levels.

Motivation

Bio-remote sensing has immense potential to revolutionize the healthcare industry, providing valuable insights into human vital signs and allowing for early detection of potential health issues and detecting incidents for the elderly living at home. Our intention is to leverage this technology to its fullest extent, bringing together experts in the field to collaborate and share their research findings, ideas, and applications. By doing so, we hope to not only promote the advancement of this technology but also to foster the development of practical solutions that can be easily implemented by care providers and end-users. Ultimately, our goal is to make healthcare more efficient, effective, and accessible to all through the use of Bio-Remote Sensing technology.

It is intended that this Special Section of IEEE Journal of Selected Areas in Sensors (JSAS) will show the state-of-the-art in Bio-Remote Sensing. Original research contributions, tutorials and review papers are sought in Bio-Remote Sensing related areas including (but not limited to):

- Computer Vision	- Sensors and Actuators	- Industrial Design
- Signal Processing	- Data Security & Integrity	- Single Board Computer
- Image Processing	- Thermal Imaging	- Electronics
- Artificial Intelligence	- Grid Computing	- Software Engineering
- Networking	- Parallel data & signal processing	- Wireless Communication
- Embedded Systems applications	- Real-time number crunching	- Medical field
- Digital Hardware design		

Solicited and invited papers shall undergo the standard IEEE Journal of Selected Areas in Sensors

(JSAS) peer review process. All manuscripts must be submitted on-line, via the IEEE Author Portal, see https://ieee.atyponrex.com/journal/jsas. When submitting, please indicate in the "Manuscript Type" roll down menu that the paper is intended for the "Bio-Remote Sensing" Special Section. Authors are particularly encouraged to **suggest names of potential reviewers** for their manuscripts in the space provided for these recommendations in *Manuscript Central*. For manuscript preparation and submission, please follow the guidelines in the *Information for Authors* at IEEE Journal of Selected Areas in Sensors web page, https://ieee-jsas.org/

Deadlines:
- Deadline for Manuscript Submission: Feb 15th, 2025
- Notification of Acceptance: Mar 31st, 2025
- Final Manuscript published in IEEE Xplore: Apr 30th, 2025

Guest Editors:
- Lead GE Kianoush Rassels, BioMechanical Engineering TU-Delft (K.Rassels@tudelft.nl)
- GE1 Paddy French, Bio-Electronics TU-Delft (p.j.french@tudelft.nl)
- GE2 Jerry Tai, Institute of Electrical and Control Engineering, National Yang Ming Tung University / Taiwan (j.tai@nycu.edu.tw)
- GE3 Jorge Martinez Castaneda, Multimedia Computing TU-Delft (J.A.MartinezCastaneda@tudelft.nl)
- GE 4, Frans van der Helm, BioMechanical Engineering TU-Delft (F.C.T.vanderHelm@tudelft.nl)