



## Emerging Trends in Deep Learning and Signal Processing for Wearable Biomedical Signal Analysis

Guest Editors:

**Dr. Hugo F. Posada-Quintero**

Department of Biomedical  
Engineering, University of  
Connecticut, Storrs, CT 06269,  
USA

**Dr. Yedukondala Rao Veeranki**

Department of Biomedical  
Engineering, University of  
Connecticut, Storrs, CT 06269,  
USA

Deadline for manuscript  
submissions:

**31 October 2024**

### Message from the Guest Editors

Dear Colleagues,

In the domain of physiological signal processing, the integration of advanced signal processing methodologies across time, frequency, time-frequency, and non-linear domains has emerged as a pivotal area of research. This Special Issue aims to offer an interdisciplinary platform for the dissemination of innovative research, methodologies, and applications related to the analysis of complex physiological signals. The Issue is designed to explore and elucidate the application of cutting-edge signal processing techniques in the analysis of a spectrum of biomedical signals, encompassing electrodermal activity (EDA), electrocardiogram (ECG), electromyogram (EMG), electroencephalogram (EEG), photoplethysmogram (PPG), as well as wearable sensor data and associated imaging modalities.

Moreover, the burgeoning synergy between deep learning algorithms in the domain of physiological signal classification, feature extraction, and predictive modeling has catalyzed advancements in terms of diagnostic and monitoring capabilities.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Santiago Marco

1. Department of Electronics and Biomedical Engineering,  
University of Barcelona, Martí I Franquès 1, 08028 Barcelona, Spain  
2. Signal and Information Processing in Sensor Systems, Institute for Bioengineering of Catalonia, The Barcelona Institute of Science and Technology, Baldiri Rexac 10-12, 08028 Barcelona, Spain

## Message from the Editor-in-Chief

Our primary goal is to encourage scientists and engineers to publish their theoretical results and developed methods in as much detail as possible. There is no limit to the maximum length of papers. Whenever possible, authors are encouraged to provide relevant data and developed code so that the results can be reproduced. Our goal is to provide a platform for scientists and engineers to share new approaches to signal processing in various application domains.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [ESCI \(Web of Science\)](#), [Inspec](#), and [other databases](#).

**Rapid Publication:** manuscripts are peer-reviewed and a first decision is provided to authors approximately 35.1 days after submission; acceptance to publication is undertaken in 6.8 days (median values for papers published in this journal in the second half of 2023).

## Contact Us

Signals Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/signals](http://mdpi.com/journal/signals)  
[signals@mdpi.com](mailto:signals@mdpi.com)  
[X@Signals\\_MDPI](#)