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AI-Based Biomedical Signal Processing

Guest Editors:

Dr. Agnese Sbröllini

Department of Information
Engineering, Università
Politecnica delle Marche, Via
Brecce Bianche 12, 60131
Ancona, Italy

Dr. Aurora Saibene

Department of Informatics,
Systems and Communication,
University of Milano-Bicocca,
20126 Milan, Italy

Deadline for manuscript
submissions:

20 December 2024

Message from the Guest Editors

Artificial intelligence (AI) is spreading, and now influences all fields of healthcare. Typically used as statistical methods, these AI-based innovative tools are also promising in the other steps of the biomedical signal processing blockchain. AI-based methods may find solutions to biomedical signal processing challenges by integrating sensors and acquisition systems, as well as preprocessing, characterizing, classifying, and interpreting biomedical signals. These solutions may be essential in all fields of healthcare. Thus, this Special Issue aims to collect original research papers and/or reviews on AI-based methods for biomedical signal processing. Main topics include, but are not limited to:

- Intelligent sensors, devices and instruments for biomedical signal acquisition;
- AI-based biomedical signal preprocessing;
- Machine learning for biomedical feature extraction and selection;
- Knowledge engineering for feature interpretation;
- AI-based clinical decision making in healthcare;
- AI-based precision medicine;
- Data analytics and mining for clinical decision support;
- Ethics of AI in healthcare.



mdpi.com/si/146384

Special Issue



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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
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