



CALL FOR PAPERS
SPECIAL SESSION ON
New trends in Artificial Intelligence for Biomedical Engineering
for ICCAD'23
May 10-12, 2023, Rome-Italy

Session Co-Chairs:

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Session description:

This special session in Artificial Intelligence (AI) for biomedical analysis will explore new strategies and related methods in AI to enhance performance of medical systems in several clinical applications. The accessibility of high-dimensional medical data and advances in computing and deep learning methods have directed the recurrent procedure of clinical investigation in biology, biophysics, and medical imaging. Also, understanding correlations between multi-modal biomedical datasets can progress diagnostics systems performance and define biomedical knowledge. There are several challenges in computer imaging systems, such as biomedical signal processing, biophysical simulation, medical image enhancement, tumor segmenting, 3D image reconstruction, and so on.

Nowadays, AI-based pattern recognition is undergoing a revolution in public health. It is expected that AI will be the main technique of the next generation for diagnosis and treatment. Different AI algorithms have significantly enhanced tumor discovery, and enabled personalized patient therapy. This Special Issue solicits state-of-the-art research findings from both academia and medical industry, with a particular highlighting on new methodologies to ensure the impact of AI in medical research and its related applications. Authors are invited to submit high for this Special Issue.

Topics of interest for this Special Issue include but are not limited to the following:

- ✓ Biomedical signal/image processing;
- ✓ Tumor segmentation, and recognition;
- ✓ Artificial intelligence for medical image analysis;
- ✓ Biophysical simulation models;
- ✓ 3D image reconstruction;
- ✓ ML/DL for applications in medical physics;

SUBMISSION

Papers must be submitted electronically for peer review by **January 31, 2023**

[Submission – ICCAD 2023 \(iccad-conf.com\)](http://iccad-conf.com)

All papers must be written in English and should describe the original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double-column format).