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Artificial Intelligence in Biomedical Image Processing

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Message from the Guest Editors

Dear Colleagues,

Artificial intelligence (AI) has seen a dramatic resurgence in the past few years. With powerful computational resources and large datasets, AI is able to give great potential to biomedical image processing, immensely.

On the other hand, challenges also emerge in applying AI, to biomedical image processing. For instance, the availability of biomedical image datasets is usually limited due to the need for laborious manual labeling, privacy, and regulatory requirements. Second, the current AI is prone to small data permutations. Addressing it is necessary and significant, especially in medicine and healthcare, to reduce misdiagnosis and mistreatment. Last but not least, most AI models are still considered black boxes and hard to interpret, largely hindering their clinical usage.

This Special Issue focuses on the subject of artificial intelligence and its application in biomedical engineering, with special attention to medical image processing. We invite authors who are interested in biomedical imaging, including but not limited to data acquisition, image reconstruction, image analysis and understanding, and computer-aided diagnosis.







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Editor-in-Chief

Message from the Editor-in-Chief

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