

## Special Issue

# Advances in Deep Learning-Based Medical Image Analysis

### Message from the Guest Editor

Deep learning is the prominent research direction for medical image analysis. The hierarchical nature of deep models learns the complex patterns in medical images, facilitating image-based diagnostics and prognosis. Different imaging modalities, including not but not limited to RGB, CT, MRI, X-ray, ultrasound, PETS, EEG, and mammogram, are used for inferring valuable insights about the patient's medical condition. In addition, multi-modality- and cross-modality-based learning algorithms are also explored where the models are learned using more than a single imaging modality. In the last decade, many algorithms have been proposed, from cell segmentation to anomaly detection, with the aim of aiding radiologists and medical doctors. However, there are many limiting factors that create barriers to the ubiquitous application of such techniques in clinical practices. The availability of a large amount of high-quality labeled data, the real-time performance bottleneck, and the accuracy of algorithms themselves are some of the key challenges that researchers are currently faced with.

### Guest Editor

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### Deadline for manuscript submissions

closed (31 December 2023)



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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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### Editor-in-Chief

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