

Special Issue

Building Generalizable Deep Learning Model for Medical Image Analysis for Multi-Center/Multi-Scanner Data

Message from the Guest Editors

In this Special Issue, we will explore the following topics:

(1) Recent one-shot/few-shot learning developments for medical image classification/segmentation using a minimal number of labelled images. (2) Generative adversarial networks (GAN)/auto-encoder-based data augmentation for building generalizable deep learning models. (3) Federated learning (FL) to collaboratively train deep-learning models using isolated patient data owned by different hospitals for various clinical applications, including medical image segmentation. (4) Transfer-learning models targeting a small quantity of labelled data and trained model performance in large datasets. (5) Evaluation of deep-learning/transfer-learning models in multicenter, multiscanner datasets. (6) Evolution of performance differences/transfer learning in deep-learning models in patients and healthy subjects. (7) Noise reduction in old MRI/CT scans to improve the performance of deep-learning models using GAN for longitudinal data analysis. ***We look forward to receiving your contributions!!!***

Guest Editors

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

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