

Special Issue

Transformer-Based Deep Learning in Medical Imaging and Healthy Sensors

Message from the Guest Editors

Transformer based deep learning models, originally introduced for natural language processing, have recently shown significant potential in the field of medical imaging and healthy sensors. Depending on the core architecture of the self-attention mechanism, transformer-based models enable to weigh the importance of different parts of the input data dynamically and excel at capturing long-range dependencies. Therefore, transformers are able to understand complex structures in medical images and has been applied to various medical imaging tasks, including medical imaging sensors. The application of transformer-based models in medical imaging and healthy sensors is rapidly advancing. Transformers are expected to play an increasingly important role in improving diagnostic accuracy, accelerating medical image processing workflows, and personalizing treatment plans, thereby driving a comprehensive revolution in medical imaging technology. This special issue aims to compile original research to report the recent findings in apply transformer-based deep learning models in medical imaging and healthy sensors.

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