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Deep Learning in Medical and Biomedical Image Processing

Guest Editor:

Dr. Shuyue Guan

Division of Imaging, Diagnostics, and Software Reliability, Office of Science and Engineering Laboratories, Center for Devices, and Radiologic Health, United States Food and Drug Administration, Silver Spring, MD, USA

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Message from the Guest Editor

Deep learning (DL) has been widely applied to various fields, such as computer vision, natural language processing, speech recognition, and bioinformatics. In particular, DL has shown its great potential and success in medical and biomedical image processing, which aims to analyze and interpret images acquired from different modalities. DL can provide accurate and efficient solutions for various clinical applications. Some common tasks in medical and biomedical image processing are image classification, segmentation, registration, reconstruction, enhancement, and synthesis. DL can handle these tasks using different architectures and techniques. However, challenges and open issues in applying DL to medical and biomedical image processing exist, such as data availability, quality, diversity, model interpretability and explainability, model robustness and generalization, model validation and evaluation, model bias, and ethical aspects. Therefore, more research and collaborations are needed to address these challenges and further advance the DL field in medical and biomedical image processing.













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Editor-in-Chief

Prof. Dr. Andreas Kjaer

Department of Clinical Physiology, Nuclear Medicine & PET National University Hospital, Rigshospitalet, University of Copenhagen, Blegdamsvej 9, DK-2100 Copenhagen, Denmark

Message from the Editor-in-Chief

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