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Applied Intelligence for Medical Image Analysis

Editors: Aarti, PhD
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Mukesh Saraswat
Himanshu Mittal, PhD

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Over the last decades, there has been a revolution in the analysis of medical images with the new technological advancements. Innovative intelligent technologies have been developed to analyze and interpret medical images automatically for diseases diagnosis and disease assessment and for combatting new diseases.

This new volume explores the latest cutting-edge research in medical image analysis. The advanced intelligent technologies discussed include machine learning, ensemble methods in machine learning, deep learning methods and firebase technology, infrared thermography, deep convolution neural networks, and more. Some of the specific uses of these technologies include for brain tumor MRIs, for breast cancer screening, for polycystic ovary syndrome classification, for detecting and monitoring Alzheimer's disease, for monitoring of newborns, for retinal disease diagnosis, for Covid-19 detection, and more.

Key features

- Covers the application of deep learning techniques for the medical image problems
- Considers the development of future machine learning techniques and further applications of existing techniques
- Presents literature reviews on deep learning methods for medical image analysis
- Discusses the applications of applied intelligence for the diagnosis of medical images, image genomics, and brain connectomics
- Relays the latest technologies and algorithms related to the state-of-the-art medical image analysis in assessing and diagnosing diseases

Applied Intelligence for Medical Image Analysis will be of interest to academics and researchers in the area of deep learning and medical imaging.

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