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New Book Announcement

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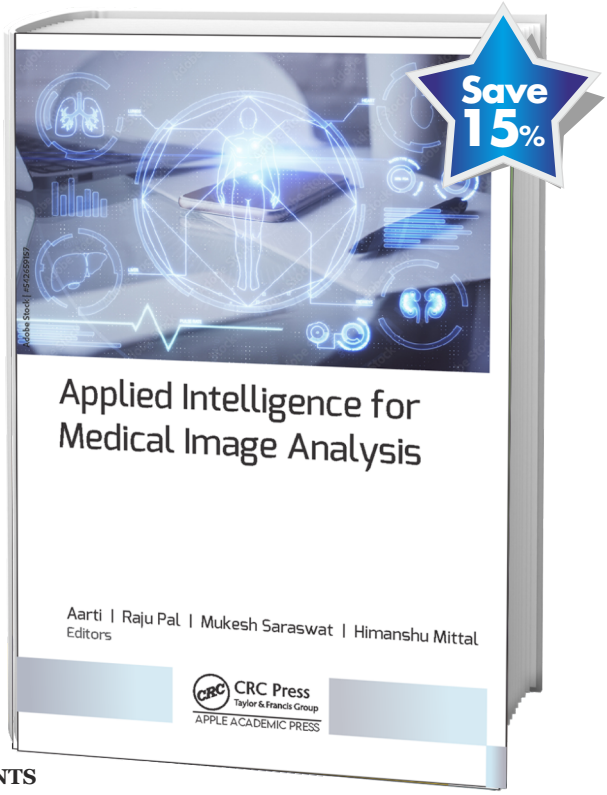
Applied Intelligence for Medical Image Analysis



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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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Applied Intelligence for Medical Image Analysis

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Dr. Raju Pal has more than seven years of teaching and research experience. He is a faculty member in the Department of Computer Science and Engineering at Jaypee Institute of Information Technology, Noida, India, where he earned his doctorate degree in Histopathological Images Analysis. He is passionate in his work in the area of machine learning, medical image analysis, and wireless sensor networks. He has made substantial contributions to the field of image processing and machine learning with over 20 published research articles. He was the part of successfully completed SERB-DST (New Delhi) funded project on Histopathological Image Analysis. He is the reviewer of many international journals, including the *Journal of Communications and Networks, Future Generation Computer Systems, Neural Computing and Applications,* etc.

Dr. Mukesh Saraswat has more than 18 years of teaching and research experience. He has guided PhD students and over 50 MTech and BTech in their dissertations. He has published more than 40 journal and conference papers in image processing, pattern recognition, data mining, and soft computing. He is the part of successfully completed DRDE-funded project on image analysis and is currently running two projects funded by SERB-DST (New Delhi) on Histopathological Image Analysis and Collaborative Research Scheme (CRS), under TEQIP III (RTU-ATU) on Smile. He has been an active member of many organizing committees of various conferences and workshops. He was also a guest editor of the *International Journal of Swarm Intelligence.* He is an active member of IEEE, ACM, and CSI professional bodies. His research areas include image processing, pattern recognition, data mining, and soft computing.

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