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Titolo	Biomedical signal and image processing with artificial intelligence // Chirag Paunwala [and six others]
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Descrizione fisica	1 online resource (423 pages)
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Soggetti	Artificial intelligence - Medical applications Imaging systems in medicine
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Lung Classification for Covid-19 -- Inspection and Test in Hemodialysis arena -- Applications of Artificial Intelligence in Medical Images Analysis -- Parameter efficient Epileptic seizure detection -- Early lung cancer detection by using an artificial intelligence system -- Decision Making Biomedical Support Systems -- Intelligent Image Segmentation Methods using Deep Convolutional Neural Networks -- Early detection of Dyslexia -- Artificial Intelligence Assisted Cardiac Signal Analysis for Heart Disease Prediction -- An optimal model selection for COVID 19 disease classification -- Histopathology Whole-Slide Image Analysis for Breast Cancer Detection -- Analysis and Classification of Impaired Speech -- Imaging technologies for early detection of breast cancer -- VLSI implementation of sEMG based classification for muscle activity control -- An Object Aware Hybrid U-Net for Breast Tumour Annotation -- Guide to scrutinize the analysis tool for biomedical signals -- Real-time COVID-19 Prediction using Chest X-ray and AI -- Classification of Primary Benign and Primary Malignant Focal Liver Lesions in Spatial and NSCT domain -- Ultrasound Image Analysis using AI -- Conclusion.
Sommario/riassunto	This book focuses on advanced techniques used for feature extraction, analysis, recognition, and classification in the area of biomedical signal and image processing. Contributions cover all aspects of artificial

intelligence, machine learning, and deep learning in the field of biomedical signal and image processing using novel and unexplored techniques and methodologies. The book covers recent developments in both medical images and signals analyzed by artificial intelligence techniques. The authors also cover topics related to development based artificial intelligence, which includes machine learning, neural networks, and deep learning. This book will provide a platform for researchers who are working in the area of artificial intelligence for biomedical applications. Provides insights into medical signal and image analysis using artificial intelligence; Includes novel and recent trends of decision support system for medical research; Outlines employment of evolutionary algorithms for biomedical data, big data analysis for medical databases, and reliability, opportunities, and challenges in clinical data.
