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Titolo	Prognostic Models in Healthcare: AI and Statistical Approaches / / edited by Tanzila Saba, Amjad Rehman, Sudipta Roy
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Collana	Studies in Big Data, , 2197-6511 ; ; 109
Disciplina	610.285
Soggetti	Computational intelligence Medical informatics Computer simulation Quantitative research Neural networks (Computer science) Computational Intelligence Health Informatics Computer Modelling Data Analysis and Big Data Mathematical Models of Cognitive Processes and Neural Networks
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Nota di contenuto	Segmentation of White Blood Cells in Acute Myeloid Leukaemia Microscopic Images: The Current Challenges and Future Solutions -- Computer Vision Based Prognostic Modeling of COVID-19 from Medical Imaging -- Skin Lesion Classification From Dermoscopic Images with Deep Residual Network based Fused Pigmented Deep Feature Extraction and Entropy Based Best Features Selection Approach -- Computer Vision Technologies for COVID-19 Prediction, Diagnosis and Prevention -- Health monitoring methods in heart diseases based on data mining approach, a directional survey -- Machine learning based brain diseases diagnosing in electroencephalogram signals, Alzheimer and Parkinson's -- Skin Lesion Detection Using Recent Machine Learning Approaches -- Improving monitoring and controling parameters for Alzheimer's patients based on IoT -- A Novel Method

for Lung Segmentation of Chest with Convolutional Neural Network -- Leukemia Detection Using Machine and Deep Learning Through Microscopic Images-A Review.

Sommario/riassunto

This book focuses on contemporary technologies and research in computational intelligence that has reached the practical level and is now accessible in preclinical and clinical settings. This book's principal objective is to thoroughly understand significant technological breakthroughs and research results in predictive modeling in healthcare imaging and data analysis. Machine learning and deep learning could be used to fully automate the diagnosis and prognosis of patients in medical fields. The healthcare industry's emphasis has evolved from a clinical-centric to a patient-centric model. However, it is still facing several technical, computational, and ethical challenges. Big data analytics in health care is becoming a revolution in technical as well as societal well-being viewpoints. Moreover, in this age of big data, there is increased access to massive amounts of regularly gathered data from the healthcare industry that has necessitated the development of predictive models and automated solutions for the early identification of critical and chronic illnesses. The book contains high-quality, original work that will assist readers in realizing novel applications and contexts for deep learning architectures and algorithms, making it an indispensable reference guide for academic researchers, professionals, industrial software engineers, and innovative model developers in healthcare industry.