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Collana	Studies in Computational Intelligence, , 1860-9503 ; ; 1182
Disciplina	006.3
Soggetti	Computational intelligence Artificial intelligence Health services administration Medical informatics Medical sciences Computational Intelligence Artificial Intelligence Health Care Management Health Informatics Health Sciences
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Nota di contenuto	Introduction to Intelligent Techniques in Healthcare -- Kuramoto Phase Model Possible New Effects of Neuronal Dynamics -- Object Detection in the Healthcare Industry Using YOLO A Better Way Than CNN -- A Study on Performance of Ensemble Based Classifiers on Healthcare Data -- Pre Diagnosis of Cardiovascular Diseases through Machine Learning and Deep Learning Techniques Using Clinical Parameters -- Machine Learning Aided Breast Cancer Detection Towards Reducing Mortality Rates -- Advancements in Diabetic Retinopathy Detection Using Deep Learning -- Advancements in Computer Aided Diagnosis Systems for Mammographic Mass Detection A Comprehensive Review.-Automated Detection of Oral Cancer through Deep Learning A Histopathological Approach -- Deep Learning Driven CNN Models for Enhanced Brain

Tumor Classification -- Improving Remote Patient Monitoring and Care Using Machine Learning -- Detecting Depression Using Textual Data from Social Media -- Machine Learning in Addiction Research Advancements, Challenges, and Future Directions -- MindEase Systematic Review for Unraveling Mental Health with Machine Learning Approach in Adults -- Early Detection of Mental Health Conditions and Advising System Using Artificial Intelligence -- Virtual Health Assistants AI in Patient Engagement -- Revolutionizing Electronic Health Records with AI in Hospitals for Patient Benefit -- Ethical Considerations in AI Enabled Healthcare -- Overcoming Challenges in the Integration of AI in Healthcare -- AI's Potential Embracing AI in the Future of Healthcare -- Strategies for AI in Healthcare Implementation.

Sommario/riassunto

This book explores the transformative role of artificial intelligence (AI) in healthcare, emphasizing its shift from a futuristic concept to an essential part of modern medical systems. The articles cover a range of AI applications, from disease diagnosis and drug design to patient engagement and mental health treatment. Advances in machine learning (ML) and deep learning (DL) technologies have opened new possibilities for diagnosing complex conditions, with examples like predictive analysis for health risks and early diagnosis of diseases such as breast cancer and diabetic retinopathy. Additionally, AI's role in treating mental health disorders is highlighted. While AI offers vast benefits, the book stresses the importance of ethical considerations, such as patient privacy and equitable access. It also addresses challenges in integrating AI within existing healthcare systems, underscoring collaboration among stakeholders as crucial. This book ultimately provides a comprehensive look at AI's potential to reshape healthcare.