

1. Record Nr.	UNINA9910847579703321
Titolo	AI and Neuro-Degenerative Diseases : Insights and Solutions // edited by Loveleen Gaur, Ajith Abraham, Reuel Ajith
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-53148-5
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (184 pages)
Collana	Studies in Computational Intelligence, , 1860-9503 ; ; 1131
Disciplina	610.285
Soggetti	Computational intelligence Biomedical engineering Artificial intelligence Computational Intelligence Biomedical Engineering and Bioengineering Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Demystifying: The Role of Artificial Intelligence in Neurodegenerative Diseases -- 2. Role Of Artificial Intelligence and Internet of Things in Neurodegenerative Diseases -- 3. Explainable Artificial Intelligence (XAI) on Neurogenerative Diseases -- 4. Clinical Genomics to Drug Discovery Using Machine Learning for Neurodegenerative disorders: A Future Perspective -- 5. Amyotrophic Lateral Sclerosis (ALS) Monitoring using Explainable AI -- 6. Prevalence of Dementia in India -- 7. Exploring AI's Role in Managing Neurodegenerative Disorders: Possibilities and Hurdles -- 8. Artificial Intelligence in Neuro Degenerative Diseases: Opportunities and Challenges -- 9. Ethical considerations: Case Scenarios.
Sommario/riassunto	This book explores the current state of healthcare practice and provides a roadmap for harnessing artificial intelligence (AI) and other modern cognitive technologies for neurogenerative diseases. The main goal of this book is to look at how these techniques can be used to classify patients with neurodegenerative diseases by extracting data from multiple modalities. It demonstrates that the growing development of computer-aided diagnosis systems has a lot of

potential to help with the diagnostic process. It offers an analysis of the prospective and perils in implementing such state of the art. Progressive brain disorders with a high prevalence in the general population include Parkinson's disease, Alzheimer's disease and other types of dementia, Huntington's disease, and motor neuron disease. Worldwide, it is estimated that 33 million people have Alzheimer's disease, and 10 million people have Parkinson's disease. The global health economy is significantly impacted by these disorders, which affect both the patient and the caregivers. Various diagnostic techniques are used for differential diagnoses, such as brain imaging, EEG analysis, molecular analysis, and cognitive, psychological, and physical examination. The book aims to develop effective treatments, enhance patient quality of life, and extend life expectancy. It focuses on novel artificial intelligence approaches to clarify the pathogenesis of neurodegenerative disorders and provide early diagnosis. The authors compile recent developments based on machine learning and deep learning techniques to diagnose neurodegenerative diseases using imaging, genetic, and clinical data. The authors support initiatives and methods that aim to improve the application of algorithms in diagnostic practice.

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