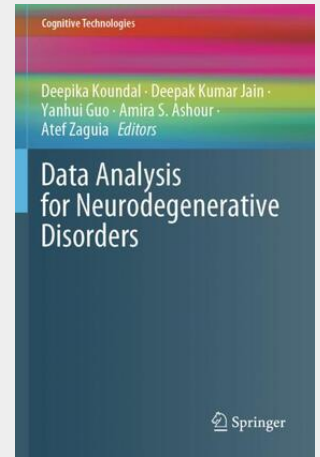Koundal / Jain / Zaguia

Data Analysis for Neurodegenerative Disorders

This book explores the challenges involved in handling medical big data in the diagnosis of neurological disorders. It discusses how to optimally reduce the number of neuropsychological tests during the classification of these disorders by using feature selection methods based on the diagnostic information of enrolled subjects. The book includes key definitions/models and covers their applications in different types of signal/image processing for neurological disorder data. An extensive discussion on the possibility of enhancing the abilities of AI systems using the different data analysis is included. The book recollects several applicable basic preliminaries of the different AI networks and models, while also highlighting basic processes in image processing for various neurological disorders. It also reports on several applications to image processing and explores numerous topics concerning the role of big data analysis in addressing signal and image processing in various real-world scenarios involving neurological disorders.This cutting-edge book highlights the analysis of medical data, together with novel procedures and challenges for handling neurological signals and images. It will help engineers, researchers and software developers to understand the concepts and different models of AI and data analysis. To help readers gain a comprehensive grasp of the subject, it focuses on three key features:? Presents outstanding concepts and models for using AI in clinical applications involving neurological disorders, with clear descriptions of image representation, feature extraction and selection.? Highlights a range of techniques for evaluating the performance of proposed CAD systems for the diagnosis of neurological disorders.? Examines various signal and image processing methods for efficient decision support systems. Soft computing, machine learning and optimization algorithms are also included to improve the CAD systems used.

213,99 €
199,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9789819921560
Medium: Buch
ISBN: 978-981-99-2156-0
Verlag: Springer Nature Singapore
Erscheinungstermin: 02.06.2024
Sprache(n): Englisch
Auflage: 2023
Serie: Cognitive Technologies
Produktform: Kartoniert
Gewicht: 423 g
Seiten: 267
Format (B x H): 155 x 235 mm

01.08.2024 | 06:20 Uhr