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Disciplina	616.8047
Soggetti	User interfaces (Computer systems) Signal processing Image processing Speech processing systems Optical data processing User Interfaces and Human Computer Interaction Signal, Image and Speech Processing Image Processing and Computer Vision
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Background -- Datasets and Pre-processing -- Neurodegenerative Feature Modeling and Learning -- Neurodegenerative Pattern Analysis -- Alzheimer's Disease Staging and Prediction -- Neuroimaging Content-Based Retrieval -- Conclusions and Future Directions.
Sommario/riassunto	This thesis covers various facets of brain image computing methods and illustrates the scientific understanding of neurodegenerative disorders based on four general aspects of multimodal neuroimaging computing: neuroimaging data pre-processing, brain feature modeling, pathological pattern analysis, and translational model development. It demonstrates how multimodal neuroimaging computing techniques can be integrated and applied to neurodegenerative disease research and management, highlighting relevant examples and case studies. Readers will also discover a number of interesting extension topics in longitudinal neuroimaging studies, subject-centered analysis, and the

brain connectome. As such, the book will benefit all health informatics postgraduates, neuroscience researchers, neurology and psychiatry practitioners, and policymakers who are interested in medical image computing and computer-assisted interventions. <
