Record Nr. UNISA996466328703316 Graphs in Biomedical Image Analysis and Integrating Medical Imaging **Titolo** and Non-Imaging Modalities [[electronic resource]]: Second International Workshop, GRAIL 2018 and First International Workshop, Beyond MIC 2018, Held in Conjunction with MICCAI 2018, Granada, Spain, September 20, 2018, Proceedings / / edited by Danail Stoyanov, Zeike Taylor, Enzo Ferrante, Adrian V. Dalca, Anne Martel, Lena Maier-Hein, Sarah Parisot, Aristeidis Sotiras, Bartlomiej Papiez, Mert R. Sabuncu, Li Shen Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-030-00689-1 Edizione [1st ed. 2018.] 1 online resource (XVI, 101 p. 26 illus.) Descrizione fisica Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 11044 Disciplina 006.37 Soggetti Optical data processing Computer science—Mathematics Artificial intelligence Algorithms Data structures (Computer science) Image Processing and Computer Vision Mathematics of Computing Artificial Intelligence Algorithm Analysis and Problem Complexity Data Structures and Information Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Graph Saliency Maps through Spectral Convolutional Networks: Application to Sex Classification with Brain Connectivity -- A Graph Representation and Similarity Measure for Brain Networks with Nodal

> Features -- Hierarchical Bayesian Networks for Modeling Inter-Class Dependencies: Application to Semi-Supervised Cell Segmentation --Multi-modal Disease Classification in Incomplete Datasets Using

Geometric Matrix Completion -- BrainParcel: A Brain Parcellation Algorithm for Cognitive State Classification -- Modeling Brain Networks with Artificial Neural Networks -- A Bayesian Disease Progression Model for Clinical Trajectories -- Multi-modal brain connectivity study using deep collaborative learning -- Towards Subject and Diagnostic Identifiability in the Alzheimer's Disease Spectrum based on Functional Connectomes -- Predicting Conversion of Mild Cognitive Impairments to Alzheimer's Disease and Exploring Impact of Neuroimaging -- Cross-Diagnostic Prediction of Dimensional Psychiatric Phenotypes in Anorexia Nervosa and Body Dysmorphic Disorder Using Multimodal Neuroimaging and Psychometric Data.

Sommario/riassunto

This book constitutes the refereed joint proceedings of the Second International Workshop on Graphs in Biomedical Image Analysis, GRAIL 2018 and the First International Workshop on Integrating Medical Imaging and Non-Imaging Modalities, Beyond MIC 2018, held in conjunction with the 21st International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2018, in Granada, Spain, in September 2018. The 6 full papers presented at GRAIL 2018 and the 5 full papers presented at BeYond MIC 2018 were carefully reviewed and selected. The GRAIL papers cover a wide range of develop graph-based models for the analysis of biomedical images and encourage the exploration of graph-based models for difficult clinical problems within a variety of biomedical imaging contexts. The Beyond MIC papers cover topics of novel methods with significant imaging and non-imaging components, addressing practical applications and new datasets.