Record Nr. UNISA996464439703316 **Titolo** Multimodal Learning for Clinical Decision Support [[electronic resource] 1: 11th International Workshop, ML-CDS 2021, Held in Conjunction with MICCAI 2021, Strasbourg, France, October 1, 2021, Proceedings / / edited by Tanveer Syeda-Mahmood, Xiang Li, Anant Madabhushi, Hayit Greenspan, Quanzheng Li, Richard Leahy, Bin Dong, Hongzhi Wang Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2021 3-030-89847-4 **ISBN** [1st ed. 2021.] Edizione Descrizione fisica 1 online resource (125 pages) Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 13050 Disciplina 616.07540285 Soggetti Image processing - Digital techniques Computer vision Machine learning Database management Social sciences - Data processing Computer Imaging, Vision, Pattern Recognition and Graphics Machine Learning **Database Management** Computer Application in Social and Behavioral Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto From Picoscale Pathology to Decascale Disease: Image Registration with a Scattering Transform and Varifolds for Manipulating Multiscale Data -- Multi-Scale Hybrid Transformer Networks: Application to Prostate Disease Classification -- Predicting Treatment Response in Prostate Cancer Patients Based on Multimodal PET/CT for Clinical Decision Support -- A Federated Multigraph Integration Approach for Connectional Brain Template Learning -- SAMA: Spatially-Aware

> Multimodal Network with Attention for Early Lung Cancer Diagnosis --Fully Automatic Head and Neck Cancer Prognosis Prediction in PET/CT

Sommario/riassunto

-- Feature Selection for Privileged Modalities in Disease Classification

-- Merging and Annotating Teeth and Roots from Automated Segmentation of Multimodal Images -- Structure and Feature based Graph U-Net for Early Alzheimer's Disease Prediction -- A Method for Predicting Alzheimer's Disease based on the Fusion of Single Nucleotide Polymorphisms and Magnetic Resonance Feature Extraction.

This book constitutes the refereed joint proceedings of the 11th International Workshop on Multimodal Learning for Clinical Decision Support, ML-CDS 2021, held in conjunction with the 24th International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2021, in Strasbourg, France, in October 2021. The workshop was held virtually due to the COVID-19 pandemic. The 10 full papers presented at ML-CDS 2021 were carefully reviewed and selected from numerous submissions. The ML-CDS papers discuss machine learning on multimodal data sets for clinical decision support and treatment planning.