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Titolo	Predictive Intelligence in Medicine : 4th International Workshop, PRIME 2021, Held in Conjunction with MICCAI 2021, Strasbourg, France, October 1, 2021, Proceedings // edited by Islem Rekik, Ehsan Adeli, Sang Hyun Park, Julia Schnabel
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Descrizione fisica	1 online resource (292 pages)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 12928
Disciplina	610.28563
Soggetti	Artificial intelligence Image processing - Digital techniques Computer vision Computer engineering Computer networks Bioinformatics Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics Computer Engineering and Networks Computational and Systems Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Self-Supervised Learning based CT Denoising using Pseudo-CT Image Pairs -- A Few-shot Learning Graph Multi-Trajectory Evolution Network for Forecasting Multimodal Baby Connectivity Development from a Baseline Timepoint -- One Representative-Shot Learning Using a Population-Driven Template with Application to Brain Connectivity Classification and Evolution Prediction -- Mixing-AdaSIN: Constructing a De-biased Dataset using Adaptive Structural Instance Normalization and Texture Mixing -- Liver Tumor Localization and Characterization from Multi-Phase MR Volumes Using Key-Slice Prediction: A Physician-Inspired Approach -- Improving Tuberculosis Recognition on Bone-

Suppressed Chest X-rays Guided by Task-Specific Features --  
Template-Based Inter-modality Super-resolution of Brain Connectivity  
-- Adversarial Bayesian Optimization for Quantifying Motion Artifact  
within MRI -- False Positive Suppression in Cervical Cell Screening via  
Attention-Guided Semi-Supervised Learning -- Investigating and  
Quantifying the Reproducibility of Graph Neural Networks in Predictive  
Medicine -- Self Supervised Contrastive Learning on Multiple Breast  
Modalities Boosts Classification Performance -- Self-Guided Multi-  
Attention Network for Periventricular Leukomalacia Recognition --  
Opportunistic Screening of Osteoporosis Using Plain Film Chest X-ray  
-- Multi-Task Deep Segmentation and Radiomics for Automatic  
Prognosis in Head and Neck Cancer -- Integrating Multimodal MRIs for  
Adult ADHD Identification with Heterogeneous Graph Attention  
Convolutional Network -- Probabilistic Deep Learning with Adversarial  
Training and Volume Interval Estimation – Better Ways to Perform and  
Evaluate Predictive Models for White Matter Hyperintensities Evolution  
-- A Multi-scale Capsule Network for Improving Diagnostic  
Generalizability in Breast Cancer Diagnosis using Ultrasonography --  
Prediction of Pathological Complete Response to Neoadjuvant  
Chemotherapy using Multi-scale Patch Learning with Mammography --  
The Pitfalls of Sample Selection: A Case Study on Lung Nodule  
Classification -- Anatomical Structure-aware Pulmonary Nodule  
Detection via Parallel Multi-Task RoI Head -- Towards Cancer Patients  
Classification Using Liquid Biopsy -- Foreseeing Survival through  
'Fuzzy Intelligence': A cognitively-inspired incremental learning based  
de novo model for Breast Cancer Prognosis by multi-omics data fusion  
-- Improving Across Dataset Brain Age Predictions using Transfer  
Learning -- Uncertainty-Based Dynamic Graph Neighborhoods For  
Medical Segmentation -- FLAT-Net: Longitudinal Brain Graph Evolution  
Prediction from a Few Training Representative Templates.

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### Sommario/riassunto

This book constitutes the proceedings of the 4th International  
Workshop on Predictive Intelligence in Medicine, PRIME 2021, held in  
conjunction with MICCAI 2021, in Strasbourg, France, in October 2021.  
\* The 25 papers presented in this volume were carefully reviewed and  
selected for inclusion in this book. The contributions describe new  
cutting-edge predictive models and methods that solve challenging  
problems in the medical field for a high-precision predictive medicine.  
\*The workshop was held virtually.

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