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Titolo	Patch-Based Techniques in Medical Imaging : First International Workshop, Patch-MI 2015, Held in Conjunction with MICCAI 2015, Munich, Germany, October 9, 2015, Revised Selected Papers // edited by Guorong Wu, Pierrick Coupé, Yiqiang Zhan, Brent Munsell, Daniel Rueckert
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Descrizione fisica	1 online resource (IX, 216 p. 81 illus. in color.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 9467
Disciplina	616.07540285
Soggetti	Optical data processing Pattern recognition Computer graphics Artificial intelligence Computer simulation Algorithms Image Processing and Computer Vision Pattern Recognition Computer Graphics Artificial Intelligence Simulation and Modeling Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	A Multi-level Canonical Correlation Analysis Scheme for Standard-dose PET Image Estimation -- Image Super-Resolution by Supervised Adaption of Patchwise Self-Similarity from High-Resolution Image -- Automatic Hippocampus Labeling Using the Hierarchy of Sub-Region Random Forests -- Isointense Infant Brain Segmentation by Stacked Kernel Canonical Correlation Analysis -- Improving Accuracy of Automatic Hippocampus Segmentation in Routine MRI by Features

Learned from Ultra-high Field MRI -- Dual-Layer l1-Graph Embedding for Semi-Supervised Image Labeling -- Automatic Liver Tumor Segmentation in Follow-up CT Studies Using Convolutional Neural Network -- Block-based Statistics for Robust Non-Parametric Morphometry -- Automatic Collimation Detection in Digital Radiographs with the Directed Hough Transform and Learning-based Edge Detection -- Efficient Lung Cancer Cell Detection with Deep Convolutional Neural Network -- An Effective Approach for Robust Lung Cancer Cell Detection -- Laplacian Shape Editing with Local Patch Based Force Field for Interactive Segmentation -- Hippocampus Segmentation through Distance Field Fusion -- Learning a Spatiotemporal Dictionary for Magnetic Resonance Fingerprinting with Compress Sensing -- Fast Regions-of-Interest Detection in Whole Slide Histopathology Images -- Reliability Guided Forward and Backward Patch-based Method for Multi-atlas Segmentation -- Correlating Tumour Histology and ex vivo MRI Using Dense Modality-Independent Patch-Based Descriptor -- Multi-Atlas Segmentation using Patch-Based Joint Label Fusion with Non-Negative Least Squares Regression -- A Spatially Constrained Deep Learning Framework for Detection of Epithelial Tumor Nuclei in Cancer Histology Images -- 3D MRI Denoising using Rough Set Theory and Kernel Embedding Method -- A Novel Cell Orientation Congruence Descriptor for Superpixel based Epithelium Segmentation in Endometrial Histology Images -- Patch-based Segmentation from MP2RAGE Images: Comparison to Conventional Techniques -- Multi-Atlas and Multi-Modal Hippocampus Segmentation for Infant MR Brain Images by Propagating Anatomical Labels on Hypergraph -- Prediction of Infant MRI Appearance and Anatomical Structure Evolution using Sparse Patch-based Metamorphosis Learning Framework -- Efficient Multi-Scale Patch-based Segmentation.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the First International Workshop on Patch-based Techniques in Medical Images, Patch-MI 2015, which was held in conjunction with MICCAI 2015, in Munich, Germany, in October 2015. The 25 full papers presented in this volume were carefully reviewed and selected from 35 submissions. The topics covered are such as image segmentation of anatomical structures or lesions; image enhancement; computer-aided prognostic and diagnostic; multi-modality fusion; mono and multi modal image synthesis; image retrieval; dynamic, functional physiologic and anatomic imaging; super-pixel/voxel in medical image analysis; sparse dictionary learning and sparse coding; analysis of 2D, 2D+t, 3D, 3D+t, 4D, and 4D+t data.
