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Nota di bibliografia

Includes bibliographical references and index.

Nota di contenuto

Resection-based Demons Regularization for Breast Tumor Bed Propagation -- Linear and Deformable Image Registration with 3D Convolutional Neural Networks -- Super Resolution of Cardiac Cine MRI Sequences Using Deep Learning -- Automated CNN-based Reconstruction of Short-Axis Cardiac MR Sequence From Real-Time Image Data -- An Unbiased Groupwise Registration Algorithm for Correcting Motion in Dynamic Contrast-Enhanced Magnetic Resonance Images -- Siamese Network for Dual-View Mammography Mass Matching -- Large-scale Mammography CAD with Deformable Conv-Nets -- Domain Adaptation for Deviating Acquisition Protocols in CNN-based Lesion Classification on Diffusion-Weighted MR Images -- Improved Breast Mass Segmentation in Mammograms with Conditional Residual U-net -- Improving Breast Cancer Detection using Symmetry Information -- Conditional Infilling GANs for Data Augmentation in Mammogram Classification -- A Unified Mammogram Analysis Method via Hybrid Deep Supervision -- Structure-aware Staging for Breast Cancer Metastases -- Reproducible evaluation of registration algorithms for movement correction in dynamic contrast enhancing magnetic resonance imaging for breast cancer diagnosis -- Robust Windowed Harmonic Phase Analysis with a Single Acquisition -- Lung Structures Enhancement in Chest Radiographs via CT based FCNN Training -- Improving the Segmentation of Anatomical Structures in Chest Radiographs using U-Net with an ImageNet Pre-trained Encoder -- Tuberculosis histopathology on x-ray CT -- A CT scan harmonization technique to detect Emphysema and Small Airway Diseases -- Transfer Learning for Segmentation of Injured Lungs using Coarse-to-Fine Convolutional Neural Networks -- High throughput lung and lobar segmentation by 2D and 3D CNN on chest CT with diffuse lung disease -- Multi-Structure Segmentation from Partially Labeled Datasets. Application to Body Composition Measurements on CT scans -- 3D Pulmonary Artery Segmentation from CTA Scans using Deep Learning with Realistic Data Augmentation -- Automatic Airway Segmentation in chest CT using Convolutional Neural Networks -- Detecting Out-of-phase Ventilation Using 4DCT to Improve Radiation Therapy for Lung Cancer -- XeMRI to CT Lung Image Registration Enhanced with Personalized 4DCT-derived Motion Model -- Rigid Lens -- Locally Rigid Approximations of Deformable Registration for Change Assessment in Thorax-Abdomen CT Follow-Up Scan -- Diffeomorphic Lung Registration using Deep CNNs and Reinforced Learning -- Transfer learning approach to predict biopsy-confirmed malignancy of lung nodules from imaging data: a pilot study -- Convolutional Neural Network Based COPD and Emphysema Classifications Are Predictive of Lung Cancer Diagnosis -- Towards an automatic lung cancer screening system in low dose computed tomography -- Automatic classification of centrilobular emphysema on CT using deep learning: comparison with visual scoring -- On the Relevance of the Loss Function in the Agatston Score Regression from non-ECG Gated CT Scans -- Accurate Measurement of Airway Morphology on Chest CT images.

Sommario/riassunto

This book constitutes the refereed joint proceedings of the Third International Workshop on Reconstruction and Analysis of Moving Body Organs, RAMBO 2018, the Fourth International Workshop on Breast Image Analysis, BIA 2018, and the First International Workshop on Thoracic Image Analysis, TIA 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 5 full papers (out of 10 submissions) presented at RAMBO, the 9 full papers (out of 18 submissions) presented at BIA, and the 20 full papers

(out of 21 submissions) presented at TIA were carefully reviewed and selected. The RAMBO papers cover aspects of medical imaging where motion plays a role in the image formation or analysis. The BIA papers deal with topics such as computer-aided detection and diagnosis of breast cancer, quantitative analysis of breast imaging modalities, and large scale breast image screening and analysis. The TIA papers cover aspects of image analysis research for lung and cardiac diseases including segmentation, registration, quantification, modeling of the image acquisition process, visualization, validation, statistical modeling, biophysical lung modeling (computational anatomy), deep learning and novel applications.

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