

1. Record Nr.	UNINA9910349269003321
Titolo	Machine Learning for Medical Image Reconstruction : Second International Workshop, MLMIR 2019, Held in Conjunction with MICCAI 2019, Shenzhen, China, October 17, 2019, Proceedings // edited by Florian Knoll, Andreas Maier, Daniel Rueckert, Jong Chul Ye
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-33843-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (ix, 266 pages)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 11905
Disciplina	610.28563 006.31
Soggetti	Artificial intelligence Education—Data processing Application software Bioinformatics Optical data processing Health informatics Artificial Intelligence Computers and Education Computer Appl. in Social and Behavioral Sciences Computational Biology/Bioinformatics Image Processing and Computer Vision Health Informatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Deep Learning for Magnetic Resonance Imaging -- Recon-GLGAN: A Global-Local context based Generative Adversarial Network for MRI Reconstruction- Self-supervised Recurrent Neural Network for 4D Abdominal and In-utero MR Imaging -- Fast Dynamic Perfusion and Angiography Reconstruction using an end-to-end 3D Convolutional Neural Network -- APIR-Net: Autocalibrated Parallel Imaging

Reconstruction using a Neural Network -- Accelerated MRI
Reconstruction with Dual-domain Generative Adversarial Network --
Deep Learning for Low-Field to High-Field MR: Image Quality Transfer
with Probabilistic Decimation Simulator -- Joint Multi-Anatomy
Training of a Variational Network for Reconstruction of Accelerated
Magnetic Resonance Image Acquisitions -- Modeling and Analysis Brain
Development via Discriminative Dictionary Learning -- Deep Learning
for Computed Tomography -- Virtual Thin Slice: 3D Conditional GAN-
based Super-resolution for CT Slice Interval -- Data Consistent Artifact
Reduction for Limited Angle Tomography with Deep Learning Prior --
Measuring CT Reconstruction Quality with Deep Convolutional Neural
Networks -- Deep Learning based Metal Inpainting in the Projection
Domain: Initial Results -- Deep Learning for General Image
Reconstruction -- Flexible Conditional Image Generation of Missing
Data with Learned Mental Maps -- Spatiotemporal PET reconstruction
using ML-EM with learned diffeomorphic deformation -- Stain Style
Transfer using Transitive Adversarial Networks -- Blind Deconvolution
Microscopy Using Cycle Consistent CNN with Explicit PSF Layer -- Deep
Learning based approach to quantification of PET tracer uptake in small
tumors -- Task-GAN: Improving Generative Adversarial Network for
Image Reconstruction -- Gamma Source Location Learning from
Synthetic Multi-Pinhole Collimator Data -- Neural Denoising of Ultra-
Low Dose Mammography -- Image Reconstruction in a Manifold of
Image Patches: Application to Whole-fetus Ultrasound Imaging --
Image Super Resolution via Bilinear Pooling: Application to Confocal
Endomicroscopy -- TPSDicyc: Improved Deformation Invariant Cross-
domain Medical Image Synthesis -- PredictUS: A Method to Extend the
Resolution-Precision Trade-off in Quantitative Ultrasound Image
Reconstruction.

Sommario/riassunto

This book constitutes the refereed proceedings of the Second International Workshop on Machine Learning for Medical Reconstruction, MLMIR 2019, held in conjunction with MICCAI 2019, in Shenzhen, China, in October 2019. The 24 full papers presented were carefully reviewed and selected from 32 submissions. The papers are organized in the following topical sections: deep learning for magnetic resonance imaging; deep learning for computed tomography; and deep learning for general image reconstruction.
