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	Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics, , 3004-9954 ; ; 12658
	Disciplina	616.99281
	Soggetti	Computer vision Machine learning Pattern recognition systems Bioinformatics Computer Vision Machine Learning Automated Pattern Recognition Computational and Systems Biology
	Lingua di pubblicazione	Inglese
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	Livello bibliografico	Monografia
	Nota di contenuto	Invited Papers -- Glioma Diagnosis and Classification: Illuminating the Gold Standard -- Multiple Sclerosis Lesion Segmentation - A Survey of Supervised CNN-Based Methods -- Computational Diagnostics of GBM Tumors in the Era of Radiomics and Radiogenomics -- Brain Lesion Image Analysis -- Automatic Segmentation of Non-Tumor Tissues in Glioma MR Brain Images Using Deformable Registration with Partial Convolutional Networks -- Convolutional neural network with asymmetric encoding and decoding structure for brain vessel segmentation on computed tomographic angiography -- Volume Preserving Brain Lesion Segmentation -- Microstructural modulations in the hippocampus allow to characterizing relapsing-remitting versus primary progressive multiple sclerosis -- Symmetric-Constrained

Irregular Structure Inpainting for Brain MRI Registration with Tumor Pathology -- Multivariate analysis is sufficient for lesion-behaviour mapping -- Label-Efficient Multi-Task Segmentation using Contrastive Learning -- Spatio-temporal Learning from Longitudinal Data for Multiple Sclerosis Lesion Segmentation -- MMSSD: Multi-scale and Multi-level Single Shot Detector for Brain Metastases Detection -- Unsupervised 3D Brain Anomaly Detection -- Assessing Lesion Segmentation Bias of Neural Networks on Motion Corrupted Brain MRI Tejas Sudharshan Mathai, Yi Wang, Nathan Cross -- Estimating Glioblastoma Biophysical Growth Parameters Using Deep Learning Regression -- Bayesian Skip Net: Building on Prior Information for the Prediction and Segmentation of Stroke Lesions -- Brain Tumor Segmentation -- Brain Tumor Segmentation Using Dual-Path Attention U-net in 3D MRI Images -- Multimodal Brain Image Analysis and Survival Prediction -- Using Neuromorphic Attention-based Neural Networks -- Context Aware 3D UNet for Brain Tumor Segmentation -- Modality-Pairing Learning for Brain Tumor Segmentation -- Transfer Learning for Brain Tumor Segmentation -- Efficient embedding network for 3D brain tumor segmentation -- Segmentation of the multimodal brain tumor images used Res-U-Net -- Vox2Vox: 3D-GAN for Brain Tumour Segmentation -- Automatic Brain Tumor Segmentation with Scale Attention Network -- Impact of Spherical Coordinates Transformation Pre-processing in Deep Convolution Neural Networks for Brain Tumor Segmentation and Survival Prediction -- Overall Survival Prediction for Glioblastoma on Pre-Treatment MRI Using Robust Radiomics and Priors -- Glioma segmentation using encoder-decoder network and survival prediction based on cox analysis -- Brain tumor segmentation with self-ensembled, deeply-supervised 3D U-net neural networks: a BraTS 2020 challenge solution -- Brain tumour segmentation using a triplanar ensemble of U-Nets on MR images -- MRI brain tumor segmentation using a 2D-3D U-Net ensemble -- Multimodal Brain Tumor Segmentation and Survival Prediction Using a 3D Self-Ensemble ResUNet -- MRI Brain Tumor Segmentation and Uncertainty Estimation using 3D-UNet architectures -- Utility of Brain Parcellation in Enhancing Brain Tumor Segmentation and Survival Prediction -- Uncertainty-driven refinement of tumor core segmentation using 3D-to-2D networks with label uncertainty -- Multi-Decoder Networks with Multi-Denoising Inputs for Tumor Segmentation -- MultiATTUNet: Brain Tumor Segmentation and Survival Multitasking -- A Two-Stage Cascade Model with Variational Autoencoders and Attention Gates for MRI Brain Tumor Segmentation -- Ensemble of Two Dimensional Networks for Bain Tumor Segmentation -- Cascaded Coarse-to-Fine Neural Network for Brain Tumor Segmentation -- Low-Rank Convolutional Networks for Brain Tumor Segmentation -- Brain tumour segmentation using cascaded 3D densely-connected U-net -- Segmentation then Prediction: A Multi-task Solution to Brain Tumor Segmentation and Survival Prediction -- Enhancing MRI Brain Tumor Segmentation with an Additional Classification Network -- Self-training for Brain Tumour Segmentation with Uncertainty Estimation and Biophysics-Guided Survival Prediction.

| Sommario/riassunto | This two-volume set LNCS 12658 and 12659 constitutes the thoroughly refereed proceedings of the 6th International MICCAI Brainlesion Workshop, BrainLes 2020, the International Multimodal Brain Tumor Segmentation (BraTS) challenge, and the Computational Precision Medicine: Radiology-Pathology Challenge on Brain Tumor Classification (CPM-RadPath) challenge. These were held jointly at the 23rd Medical Image Computing for Computer Assisted Intervention Conference, MICCAI 2020, in Lima, Peru, in October 2020.* The revised |

selected papers presented in these volumes were organized in the following topical sections: brain lesion image analysis (16 selected papers from 21 submissions); brain tumor image segmentation (69 selected papers from 75 submissions); and computational precision medicine: radiology-pathology challenge on brain tumor classification (6 selected papers from 6 submissions). *The workshop and challenges were held virtually.