Record Nr. UNINA9910410059703321 Biomedical Image Registration: 9th International Workshop, WBIR 2020, **Titolo** Portorož, Slovenia, December 1–2, 2020, Proceedings / / edited by Žiga Spiclin, Jamie McClelland, Jan Kybic, Orcun Goksel Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-50120-5 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (x, 176 pages): illustrations Collana Image Processing, Computer Vision, Pattern Recognition, and Graphics; : 12120 616.0754 Disciplina 006.6 Soggetti Optical data processing Artificial intelligence Pattern recognition Application software Computer organization Computers Image Processing and Computer Vision Artificial Intelligence Pattern Recognition **Computer Applications** Computer Systems Organization and Communication Networks Computing Milieux Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Registration Initialization and Acceleration -- Nonlinear Alignment of Whole Tractograms with the Linear Assignment Problem -- Learning-

Registration Initialization and Acceleration -- Nonlinear Alignment of Whole Tractograms with the Linear Assignment Problem -- Learning-based Affine Registration of Histological Images -- Enabling Manual Intervention for Otherwise Automated Registration of Large Image Series -- Towards Segmentation and Spatial Alignment of the Human Embryonic Brain using Deep Learning for Atlas-based Registration -- Learning Deformable Image Registration with Structure Guidance

Constraints for Adaptive Radiotherapy -- Interventional Registration --Multilevel 2D-3D Intensity-based Image Registration -- Towards Automated Spine Mobility Quantification: a Locally Rigid CT to X-ray Registration Framework -- Landmark based Registration -- Reinforced Redetection of Landmark in Pre- and Post-Operative Brain Scan using Anatomical Guidance for Image Alignment -- Deep Volumetric Feature Encoding for Biomedical Images -- Multi-Channel Registration --Multi-Channel Image Registration of Cardiac MR Using Supervised Feature Learning with Convolutional Encoder-Decoder Network --Multi-Channel Registration for Diffusion MRI: Longitudinal Analysis for the Neonatal Brain -- An Image Registration-based Method for EPI Distortion Correction based on Opposite Phase Encoding (COPE) --Diffusion Tensor driven Image registration: a Deep Learning Approach -- Multimodal MRI Template Creation in the Ring-Tailed Lemur and Rhesus Macaque -- Sliding Motion -- An Unsupervised Learning Approach to Discontinuity-preserving Image Registration -- An Image Registration Framework for Discontinuous Mappings along Cracks.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th International Workshop on Biomedical Image Registration, WBIR 2020, which was supposed to be held in Portorož, Slovenia, in June 2020. The conference was postponed until December 2020 due to the COVID-19 pandemic. The 16 full and poster papers included in this volume were carefully reviewed and selected from 22 submitted papers. The papers are organized in the following topical sections: Registration initialization and acceleration, interventional registration, landmark based registration, multi-channel registration, and sliding motion.