Record Nr. UNINA9910349396903321 **Titolo** Intravascular Imaging and Computer Assisted Stenting and Large-Scale Annotation of Biomedical Data and Expert Label Synthesis: 7th Joint International Workshop, CVII-STENT 2018 and Third International Workshop, LABELS 2018, Held in Conjunction with MICCAI 2018, Granada, Spain, September 16, 2018, Proceedings / / edited by Danail Stoyanov, Zeike Taylor, Simone Balocco, Raphael Sznitman, Anne Martel, Lena Maier-Hein, Luc Duong, Guillaume Zahnd, Stefanie Demirci, Shadi Albargouni, Su-Lin Lee, Stefano Moriconi, Veronika Cheplygina, Diana Mateus, Emanuele Trucco, Eric Granger, Pierre Jannin Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-030-01364-2 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (xvii, 202 pages): color illustrations Collana Image Processing, Computer Vision, Pattern Recognition, and Graphics; : 11043 651.504261 Disciplina 610.285 Soggetti Optical data processing Health informatics Artificial intelligence Computer organization Image Processing and Computer Vision **Health Informatics** Artificial Intelligence Computer Systems Organization and Communication Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes index. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Blood-flow estimation in the hepatic arteries based on 3D/2D angiography registration -- Automated quantification of blood flow velocity from time-resolved CT angiography -- Multiple device segmentation for fluoroscopic imaging using multi-task learning --

Segmentation of the Aorta Using Active Contours with Histogram-Based

Descriptors -- Layer Separation in X-ray Angiograms for Vessel

Enhancement with Fully Convolutional Network -- Generation of a HER2 breast cancer gold-standard using supervised learning from multiple experts -- Deep Learning-based Detection and Segmentation for BVS Struts in IVOCT Images -- Towards Automatic Measurement of Type B Aortic Dissection Parameters -- Prediction of FFR from IVUS Images using Machine Learning -- Deep Learning Retinal Vessel Segmentation From a Single Annotated Example: An Application of Cyclic Generative Adversarial Neural Networks -- An Efficient and Comprehensive Labeling Tool for Large-scale Annotation of Fundus Images -- Crowd disagreement about medical images is informative -- Imperfect Segmentation Labels: How Much Do They Matter? -- Crowdsourcing annotation of surgical instruments in videos of cataract surgery --Four-dimensional ASL MR angiography phantoms with noise learned by neural styling -- Feature learning based on visual similarity triplets in medical image analysis: A case study of emphysema in chest CT scans -- Capsule Networks against Medical Imaging Data Challenges -- Fully Automatic Segmentation of Coronary Arteries based on Deep Neural Network in Intravascular Ultrasound Images -- Weakly-Supervised Learning for Tool Localization in Laparoscopic Videos -- Radiology Objects in COntext (ROCO) -- Improving out-of-sample prediction of quality of MRIQC.

## Sommario/riassunto

This book constitutes the refereed joint proceedings of the 7th Joint International Workshop on Computing and Visualization for Intravascular Imaging and Computer Assisted Stenting, CVII-STENT 2018, and the Third International Workshop on Large-Scale Annotation of Biomedical Data and Expert Label Synthesis, LABELS 2018, held in conjunction with the 21th International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2018, in Granada, Spain, in September 2018. The 9 full papers presented at CVII-STENT 2017 and the 12 full papers presented at LABELS 2017 were carefully reviewed and selected. The CVII-STENT papers feature the state of the art in imaging, treatment, and computer-assisted intervention in the field of endovascular interventions. The LABELS papers present a variety of approaches for dealing with few labels, from transfer learning to crowdsourcing.