

1. Record Nr.	UNINA9910349274303321
Titolo	Machine Learning and Medical Engineering for Cardiovascular Health and Intravascular Imaging and Computer Assisted Stenting : First International Workshop, MLMECH 2019, and 8th Joint International Workshop, CVII-STENT 2019, Held in Conjunction with MICCAI 2019, Shenzhen, China, October 13, 2019, Proceedings // edited by Hongen Liao, Simone Balocco, Guijin Wang, Feng Zhang, Yongpan Liu, Zijian Ding, Luc Duong, Renzo Phellan, Guillaume Zahnd, Katharina Breininger, Shadi Albarqouni, Stefano Moriconi, Su-Lin Lee, Stefanie Demirci
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-33327-2
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XVII, 212 p. 83 illus., 68 illus. in color.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 11794
Disciplina	610.285
Soggetti	Optical data processing Artificial intelligence Image Processing and Computer Vision Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Proceedings of the Machine Learning and Medical Engineering for Cardiovascular Health, MLMECH 2019 -- Arrhythmia Classification with Attention-Based ResBiLSTM-Net -- A Multi-Label Learning Method to detect Arrhythmia Based on -- An Ensemble Neural Network for Multi-label Classification of Electrocardiogram -- Automatic Diagnosis with 12-lead ECG Signals -- Diagnosing Cardiac Abnormalities from 12-Lead Electrocardiograms Using Enhanced Deep Convolutional Neural Networks -- Transfer Learning for Electrocardiogram Classification under Small Dataset -- Multi-label classification of abnormalities in 12-lead ECG using 1D CNN and LSTM -- An Approach to Predict Multiple Cardiac Diseases -- A 12-lead ECG Arrhythmia Classification Method Based on 1D Densely Connected CNN -- Automatic Multi-label

Classification in 12-lead ECGs Using Neural Networks and Characteristic Points -- Automatic Detection of ECG Abnormalities by using an Ensemble of Deep Residual Networks with Attention -- Deep Learning to Improve Heart Disease Risk Prediction -- LabelECG: A Web-based Tool for Distributed Electrocardiogram Annotation -- Particle Swarm Optimization for Great Enhancement in Semi-Supervised Retinal Vessel Segmentation with Generative Adversarial Networks -- Attention-Guided Decoder in Dilated Residual Network for Accurate Aortic Valve Segmentation in 3D CT Scans -- ARVBNNet: Real-time Detection of Anatomical Structures in Fetal Ultrasound Cardiac Four-chamber Planes -- Proceedings of the Computing and Visualization for Intravascular Imaging and Computer Assisted Stenting, CVII-STENT 2019 -- The Effect of Labeling Duration and Temporal Resolution on Arterial Transit Time Estimation Accuracy in 4D ASL MRA Datasets - a Flow Phantom Study -- Towards Quantifying Neurovascular Resilience -- Random 2.5D U-net for Fully 3D Segmentation -- Abdominal aortic aneurysm segmentation using convolutional neural networks trained with images generated with a synthetic shape model -- Tracking of intracavitary instrument markers in coronary angiography images -- Healthy Vessel Wall Detection Using U-Net in Optical Coherence Tomography -- Advanced Multi-objective Design Analysis to Identify Ideal Stent Design -- Simultaneous Intracranial Artery Tracing and Segmentation from Magnetic Resonance Angiography by Joint Optimization from Multiplanar Reformation.

---

Sommario/riassunto

This book constitutes the refereed proceedings of the First International Workshop on Machine Learning and Medical Engineering for Cardiovascular Healthcare, MLMECH 2019, and the International Joint Workshops on Computing and Visualization for Intravascular Imaging and Computer Assisted Stenting, CVII-STENT 2019, held in conjunction with MICCAI 2019, in Shenzhen, China, in October 2019. For MLMECH 2019, 16 papers were accepted for publication from a total of 21 submissions. They focus on machine learning techniques and analyzing of ECG data in the diagnosis of heart diseases. CVII-STENT 2019 accepted all 8 submissions for publication. They contain technological and scientific research concerning endovascular procedures. .

---