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Titolo	Statistical Atlases and Computational Models of the Heart. ACDC and MMWHS Challenges [[electronic resource]] : 8th International Workshop, STACOM 2017, Held in Conjunction with MICCAI 2017, Quebec City, Canada, September 10-14, 2017, Revised Selected Papers // edited by Mihaela Pop, Maxime Sermesant, Pierre-Marc Jodoin, Alain Lalande, Xiaohai Zhuang, Guang Yang, Alistair Young, Olivier Bernard
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Soggetti	Optical data processing Artificial intelligence Image Processing and Computer Vision Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Regular Papers -- Multiview Machine Learning Using an Atlas of Cardiac Cycle Motion -- 1 Introduction -- 2 Materials -- 3 Methods -- 3.1 Motion Atlas Formation -- 3.2 Multiview Classification -- 4 Experiments and Results -- 5 Discussion -- References -- Joint Myocardial Registration and Segmentation of Cardiac BOLD MRI -- 1 Introduction -- 2 Background -- 3 Methods -- 3.1 Dictionary Learning Based Image Segmentation -- 3.2 Graph-Based Joint Optimization -- 3.3 Dictionary Update -- 4 Experimental Results -- 4.1 Data Preparation and Implementation Details -- 4.2 Visual Evaluation -- 4.3 Quantitative Comparison -- 4.4 CAP Dataset -- 5 Conclusion -- References -- Transfer Learning for the Fully Automatic Segmentation of Left Ventricle Myocardium in Porcine Cardiac Cine MR Images -- Abstract -- 1 Introduction -- 2 Method -- 2.1 Data Description -- 2.2 Image Preprocessing -- 2.3 CNN Architecture and Training Setup -- 2.4 Transfer Learning -- 3

Experiments and Results -- 4 Conclusion and Discussions --

References -- Left Atrial Appendage Neck Modeling for Closure Surgery

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Local Probabilistic Atlases and a Posteriori Correction for the Segmentation of Heart Images -- 1 Introduction -- 2 Methods. 2.1 Construction of the a Priori Information -- 2.2 Segmentation -- 2.3 A Posteriori Correction -- 3 Experiments -- 4 Results -- 5 Conclusion -- References --

Hybrid Loss Guided Convolutional Networks for Whole Heart Parsing -- 1 Introduction -- 2 Methodology -- 2.1 Intensity Calibration as Preprocessing -- 2.2 Enhance the Training of 3D FCN -- 2.3 Hybrid Loss Guided Class-Balanced Segmentation -- 3 Experimental Results -- 4 Conclusions -- References --

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U-Net -- 2.4 Implementation Details -- 3 Results -- 4 Discussion and Conclusion -- References -- Automatic Whole Heart Segmentation in CT Images Based on Multi-atlas Image Registration -- Abstract -- 1 Introduction -- 2 Methodology -- 2.1 A Three-Step Multi-atlas-Based Whole Heart Segmentation -- 2.2 Multiple Atlas Images -- 3 Experimental Results -- 4 Conclusion -- References -- Author Index.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the 8th International Workshop on Statistical Atlases and Computational Models of the Heart: ACDC and MMWHS Challenges 2017, held in conjunction with MICCAI 2017, in Quebec, Canada, in September 2017. The 27 revised full workshop papers were carefully reviewed and selected from 35 submissions. The papers cover a wide range of topics computational imaging and modelling of the heart, as well as statistical cardiac atlases. The topics of the workshop included: cardiac imaging and image processing, atlas construction, statistical modelling of cardiac function across different patient populations, cardiac computational physiology, model customization, atlas based functional analysis, ontological schemata for data and results, integrated functional and structural analyses, as well as the pre-clinical and clinical applicability of these methods. Besides regular contributing papers, additional efforts of STACOM workshop were also focused on two challenges: ACDC and MM-WHS.

2. Record Nr.	UNINA9910254597003321
Titolo	3rd International Symposium of Space Optical Instruments and Applications : Beijing, China June 26 - 29th 2016 // edited by H. Paul Urbach, Guangjun Zhang
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Descrizione fisica	1 online resource (XI, 517 p. 301 illus., 207 illus. in color.)
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Disciplina	522.2
Soggetti	Lasers Astronomy - Observations Geographic information systems Aerospace engineering Astronautics Laser Astronomy, Observations and Techniques Geographical Information System Aerospace Technology and Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Space optical remote sensing system design -- Advanced optical system design -- Remote sensor calibration and measurement -- Remote sensing data processing and information extraction -- Remote sensing data applications. .
Sommario/riassunto	This volume contains selected and expanded contributions presented at the 3rd Symposium on Space Optical Instruments and Applications in Beijing, China June 28 – 29, 2016. This conference series is organised by the Sino-Holland Space Optical Instruments Laboratory, a cooperation platform between China and the Netherlands. The symposium focused on key technological problems of optical instruments and their applications in a space context. It covered the latest developments, experiments and results regarding theory, instrumentation and applications in space optics. The book is split

across five topical sections. The first section covers space optical remote sensing system design, the second advanced optical system design, the third remote sensor calibration and measurement. Remote sensing data processing and information extraction is then presented, followed by a final section on remote sensing data applications. .
