Lecture Notes in Computer Science 10945

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Francisco José Perales · Josef Kittler (Eds.)

Articulated Motion and Deformable Objects

10th International Conference, AMDO 2018
Palma de Mallorca, Spain, July 12–13, 2018
Proceedings

Springer

Editors
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Palma de Mallorca
Spain

Josef Kittler
University of Surrey
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ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Computer Science
ISBN 978-3-319-94543-9 ISBN 978-3-319-94544-6 (eBook)
https://doi.org/10.1007/978-3-319-94544-6

Library of Congress Control Number: 2018947361

LNCS Sublibrary: SL6 – Image Processing, Computer Vision, Pattern Recognition, and Graphics

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Printed on acid-free paper

This Springer imprint is published by the registered company Springer International Publishing AG
part of Springer Nature
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

The AMDO 2018 conference, held at the University of Balearic Islands, Palma de Mallorca, during July 12–13, 2018, was sponsored by the AERFAI (Spanish Association in Pattern Recognition and Artificial Intelligence) and the Mathematics and Computer Science Department of the UIB. The event was also supported by important commercial and research organization, whose contributions are gratefully acknowledged. The main supporters were: VICOM Tech, Hasselt University, EDM (Expertise Centrum voor Digitale Media), PCE Instruments, and the AIPO Association.

The subject of the conference was the motion of articulated objects in a sequence of images and models for deformable objects. The ultimate goal of research in these areas is the understanding and automatic interpretation of the motion of complex objects in real-world image sequences and video. The main topics addressed in these conference proceedings are: advanced computer graphics and immersive video games, human modeling and animation, human motion analysis and tracking, 3D human reconstruction and recognition, multimodal user interaction and applications, ubiquitous and social computing, design tools, input technology, programming user interfaces, 3D medical deformable models and visualization, deep learning methods for computer vision and graphics, and multibiometric.

The AMDO 2018 conference is a successor of its nine previous editions, which have been regarded as a European reference for advances in this research area. The main goal of the conference was to promote the interaction and collaboration of researchers working on the topics covered by the conference. The focus of the meeting was on new perceptual user interfaces and emerging technologies, aspiring to accelerate the impact of the field on human–computer interaction. The new perspective of AMDO 2018 was the strengthening of the relationship between the core scientific areas that share the study of the human body using computer technologies as the main tool. The conference included several sessions of oral papers and a poster session. It benefited from the contributions of the invited speakers, whose talks addressed various aspects of the AMDO field of research. The invited speakers included Prof. Nicu Sebe (University of Trento, Italy) whose talk addressed "Deep Learning for Analysis and Generation of Facial Attributes"; Prof. Ricardo Chavarriaga (EPFL STI IBI-STI CNBI, Switzerland) discussing "Symbiotic Interaction Through Brain–Machine Interfacing, Machine Learning, and VR"; Prof. Jordi Gonzalez (CVC-UAB, Spain), who expounded on "Going Beyond Deep Learning for Understanding Human Behaviors in Image Sequences"; and Prof. Jose Luis Lisani (DMI-UIB, Spain) whose talk addressed "Color Preprocessing and Its Effect on Learning."

July 2018

F. J. Perales
J. Kittler

Organization

AMDO 2018 was organized by the Computer Graphics, Vision, and Artificial Intelligence team of the Department of Mathematics and Computer Science, Universitat de les Illes Balears (UIB) in cooperation with AERFAI (Spanish Association for Pattern Recognition and Image Analysis).

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Contents

Mammographic Mass Segmentation Using Fuzzy C–means and Decision Trees 1
Damian Valdés-Santiago, Raúl Quintana-Martínez, Ángela León-Mecías, and Marta Lourdes Baguer Díaz-Romañach

Refining the Pose: Training and Use of Deep Recurrent Autoencoders for Improving Human Pose Estimation 11
Niall McLaughlin and Jesus Martinez del Rincon

How Can Deep Neural Networks Be Generated Efficiently for Devices with Limited Resources?. 24
Unai Elordi, Luis Unzueta, Ignacio Arganda-Carreras, and Oihana Otaegui

Controlling a Smartphone with Brain-Computer Interfaces: A Preliminary Study 34
Víctor Martínez-Cagigal, Eduardo Santamaría-Vázquez, and Roberto Hornero

Capturing Industrial Machinery into Virtual Reality. 44
Jeroen Put, Nick Michiels, Fabian Di Fiore, and Frank Van Reeth

Leishmaniasis Parasite Segmentation and Classification Using Deep Learning. 53
Marc Górriz, Albert Aparicio, Berta Raventós, Verónica Vilaplana, Elisa Sayrol, and Daniel López-Codina

Robust Pedestrian Detection for Semi-automatic Construction of a Crowded Person Re-Identification Dataset 63
Zengxi Huang, Zhen-Hua Feng, Fei Yan, Josef Kittler, and Xiao-Jun Wu

Shape and Appearance Based Sequenced Convnets to Detect Real-Time Face Attributes on Mobile Devices 73
Nicolas Livet and George Berkowski

Image Colorization Using Generative Adversarial Networks 85
Kamyar Nazeri, Eric Ng, and Mehran Ebrahimi

Multimodal Deep Learning for Advanced Driving Systems 95
Nerea Aranjuelo, Luis Unzueta, Ignacio Arganda-Carreras, and Oihana Otaegui

Optical Recognition of Numerical Characters in Digital Images of Glucometers 106
Claudia Marcela Ospina Mosquera, Octavio José Salcedo Parra, and Miguel J. Espitia R.

A Comparison of Text String Similarity Algorithms for POI Name Harmonisation 121
Jiří Kysela

Author Index 131