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Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

Francisco J. Perales Robert B. Fisher
Thomas B. Moeslund (Eds.)

Articulated Motion and Deformable Objects

7th International Conference, AMDO 2012
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Proceedings

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Volume Editors

Francisco J. Perales López
UIB – Universitat de les Illes Balears
Dept. of Computer Science and Mathematics
C/ Valldemossa km 7.5, PC 07122, Palma de Mallorca, Spain
E-mail: paco.perales@uib.es

Robert B. Fisher
University of Edinburgh
School of Informatics
1.26 Informatics Forum, 10 Crichton St., Edinburgh, EH8 9AB, UK
E-mail: rbf@inf.ed.ac.uk

Thomas B. Moeslund
Aalborg University
Dept. for Architecture, Design and Media Technology
Niels Jernes Vej 14, 9220 Aalborg East, Denmark
E-mail: tbm@create.aau.dk

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Preface

The AMDO 2012 conference took place at the Hotel Mon Port, Port d'Andratx (Mallorca), during July 11–13, 2012, institutionally sponsored by MEC (Ministerio de Educación y Ciencia, Spanish Government), the Conselleria d'Economia, Hisenda i Innovacióó (Balearic Islands Government), the Consell de Mallorca, the AERFAI (Spanish Association in Pattern Recognition and Artificial Intelligence), the EG(Eurographics Association Spanish Section), the IEEE S.E (Advancing Technology for Humanity) and the Mathematics and Computer Science Department of the UIB. Important commercial and research sponsors also collaborated with practical demonstrations, and the main contributors were: Anima Information Technology, VICOM Tech, ANDROME Iberica, EDM (Expertise Cemtrum voor Digitale Media), INESCOP (Instituto Tecnologico del Calzado y Conexas), Aquateknica S.L.

The subject of the conference was the ongoing research on articulated motion in a sequence of images and sophisticated models for deformable objects. The goals of these areas are the understanding and interpretation of the motion of complex objects that can be found in sequences of images in the real world. The main topics considered as priority were: geometric and physical deformable models, motion analysis, articulated models and animation, modelling and visualization of deformable models, deformable model applications, motion analysis applications, single or multiple human motion analysis and synthesis, face modelling, tracking, recovering and recognition models, virtual and augmented reality, haptics devices, and biometrics techniques. The conference topics were grouped into four tracks: Track 1: Advanced Computer Graphics (Human Modelling and Animation), Track 2: Human Motion (Analysis, Tracking, 3D Reconstruction and Recognition), Track 3: Multimodal User Interaction and Applications, Track 4: Affective Interfaces (recognition and interpretation of emotions, ECAs - embodied conversational agents in HCI).

AMDO 2012 was the natural evolution of the six previous editions in this series and has been consolidated as a European reference for symposiums on the topics mentioned above. The main goal of this conference was to promote interaction and collaboration among researchers working directly in the areas covered by the main tracks. New perceptual user interfaces and emerging technologies increase the relation between areas involved with human–computer interaction. The new perspective of the AMDO 2012 conference was the strengthening of the relationship between the areas that share as key point the study of the human body using computer technologies as the main tool. The response to the Call for Papers for this conference was satisfactory. From 44 full papers submitted, 27 were accepted for oral presentation. The review process was carried out by the Program Committee, each paper being assessed by at least two reviewers. The conference included several sessions of oral presented papers and three

tutorials. Also, the conference benefited from the collaboration of the invited speakers treating various aspects of the main topics. The invited speakers were: Thomas B. Moeslund (University of Aalborg, Denmark) Talk: Analyzing People in Thermal Imagery. Sergio Escalera (University of Barcelona, Spain) Talk: Human Behavior Analysis Using Depth Maps. Xianghua Xie (Swansea University, UK) Title: Deformable Model in Segmentation and Tracking.

July 2012

F.J. Perales
R. Fisher
T.B. Moeslund

Organization

AMDO 2012 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 AERFAI (Spanish Association for Pattern Recognition and Image Analysis) and EG S.E.(Eurograhics Association).

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