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Computer Vision, Imaging and Computer Graphics – Theory and Applications

International Joint Conference, VISIGRAPP 2013
Barcelona, Spain, February 21–24, 2013
Revised Selected Papers

Springer

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ISSN 1865-0929 ISSN 1865-0937 (electronic)
ISBN 978-3-662-44910-3 ISBN 978-3-662-44911-0 (eBook)
DOI 10.1007/978-3-662-44911-0

Library of Congress Control Number: 2014950073

Springer Heidelberg New York Dordrecht London

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Printed on acid-free paper

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Preface

This book includes the extended versions of the selected papers from VISIGRAPP 2013, the International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications, which was held in Barcelona, Spain, during 21 to 24 February 2013 and organized by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC).

VISIGRAPP comprises three conferences, namely, the International Conference on Computer Vision Theory and Applications (VISAPP), the International Conference on Computer Graphics Theory and Applications (GRAPP), and the International Conference on Information Visualization Theory and Applications (IVAPP).

VISIGRAPP received a total of 445 paper submissions from more than 50 countries. After a rigorous double-blind evaluation, only 13 % of the papers were accepted and published as full papers. These numbers clearly show that this conference is aiming at high quality standards and is now an established venue for researchers of the broad fields of computer vision, image analysis, computer graphics, and information visualization. From the set of full papers, 15 were selected for inclusion in this book. The selection process was based on quantitative and qualitative evaluation results provided by the Program Committee reviewers as well as the feedback on paper presentations provided by the session chairs during the conference. After selection, the accepted papers were further revised and extended by the authors. Our gratitude goes to all contributors and reviewers, without whom this book would not have been possible. Apart from the full papers, 23 % of the papers were accepted for short presentations and 23 % accepted for poster presentations. These works were not considered for the present book selection process.

As VISAPP 2013 constituted the largest part of VISIGRAPP with 319 submissions, we decided to select and integrate 9 full papers aiming to cover different aspects and areas related to computer vision such as image formation and pre-processing, image and video analysis and understanding, motion tracking, stereo vision as well as diverse computer vision applications and services.

We would also like to mention that when we selected the papers from VISAPP for this book our intention was to cover and highlight research from different areas and sub-areas related to computer vision. Therefore, papers were mainly competing with other papers having similar content and therefore we want to acknowledge that other high quality papers accepted at the conference could have been integrated in this book if we had space for them.

Concerning GRAPP 2013, 84 papers were submitted and it was decided to include 4 full papers. The papers selection was based on both the reviewers' feedback and the quality of the oral presentation appreciated by the GRAPP program co-chairs. We tried to cover the main areas of computer graphics to make the content of the book similar to the research addressed in the conference.

The 2 selected IVAPP 2013 papers are not only excellent representatives of the field of information visualization but also form a quite balanced representation of the field itself. Above all, they are almost as diverse and exciting as the field of information visualization itself.

It is not to be expected that any single reader is equally interested in all 15 of the selected VISIGRAPP papers; however, the diversity of these papers makes it very likely that all readers can find something of interest in this selection.

VISIGRAPP 2013 included four invited keynote lectures, presented by internationally renowned researchers, whom we would like to thank for their contribution to reinforce the overall quality of the conference, namely, in alphabetical order: Frank van Ham (IBM Software Group, United Kingdom), Alfred Inselberg (Tel Aviv University, Israel), Roberto Scopigno (Visual Computing Lab, CNR-ISTI, Italy) and Jeffrey Ventrella (Visual Music Systems, United States).

We wish to thank all those who supported VISIGRAPP and helped to organize the conference. On behalf of the Conference Organizing Committee, we would like to especially thank the authors, whose work was the essential part of the conference and contributed to a very successful event. We would also like to thank the members of the Program Committee, whose expertise and diligence were instrumental to ensure the quality of the final contributions. We also wish to thank all the members of the Organizing Committee whose work and commitment was invaluable. Last but not least, we would like to thank Springer for their collaboration in getting this book to print.

December 2013

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