This book contains the proceedings of the eighth edition of International Conference on Computer Vision Theory and Applications (VISAPP) organized and sponsored by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC) and technically co-sponsored by IEEE Computer Society and IEEE VGTC.

Since its first edition in 2006, VISAPP has been bringing together researchers from all over the world to share new knowledge, insights, and experimental results in these areas. The conference focused on five different Computer Vision areas, from “Image Formation and Preprocessing” to “Image and Video Analysis” including “Image and Video Understanding”, “Applications and Services” and “Motion, Tracking and Stereo Vision”. All tracks focus on real world applications and highlight the benefits of Computer Vision for industry and services, thus making a bridge between the Academia and the Enterprise worlds.

VISAPP 2014 received 382 paper submissions (regular and positions) from all continents. From these, 66 papers will be presented as full papers, 106 were accepted for short presentation and another 103 for poster presentation. These numbers, leading to a full-paper acceptance ratio of 17%, show the intention of preserving a high quality forum for the forthcoming editions of the conference.

The high number and high quality of the papers received imposed difficult choices in the review process. Each paper was sent to at least two reviewers. From these reviews, those papers that were adequately balanced in terms of quality, originality, and relevance to the conference themes were selected. Reviewers’ assignment and final decision about acceptance have been obtained by considering the invaluable work and support of selected Area Chairs. We hope that these Conference Proceedings, submitted for indexation by Thomson Reuters Conference Proceedings Citation Index, INSPEC, DBLP, and EI, may help the Computer Vision community to find interesting research work. Furthermore, a short list of presented papers will be selected to be expanded into a forthcoming book of VISIGRAPP Selected Papers to be published by Springer during 2014 in the CCIS series. All papers presented at this conference will be available at the SCITEPRESS Digital Library.

The conference schedule is arranged by including 11 parallel oral sessions, 3 poster sessions, 3 special sessions namely Ultra Wide Context and Content Aware Imaging – PANORAMA, Active Robot Vision – WARV; and ICT-based Analysis and Modeling of Intangible Cultural Heritage – IAMICH and a Doctoral Consortium which will certainly provide an opportunity for graduate students to explore their research interests in an interdisciplinary workshop, under the guidance of a panel of distinguished experts in the field.

Moreover, we are proud to inform that the program also includes four plenary keynote lectures, given by internationally distinguished researchers, namely Stephan Diehl (University of Trier, Germany), Miroslaw Z. Bober (University of Surrey, United Kingdom), Andreas Holzinger (Medical University Graz, Austria) and Gudrun Klinker (TU München, Germany).
thus contributing to increase the overall quality of the conference and to provide a deeper understanding of the conference interest fields.

The keynote lectures allowed to increase the overall quality of the conference and to provide a deeper understanding of the conference interest fields. In order to promote the development of professional networks the organizing committee has prepared a Conference Dinner in the evening of January 7th.

Finally, we would like to express our thanks, first of all, to the authors of the technical papers, whose work and dedication make possible to put together a program that we believe very exciting and of high technical quality. Next, we would like to thank Area Chairs, all the members of the program committee and auxiliary reviewers, who helped us with their expertise and time. We would also like to thank the invited speakers for their invaluable contribution and for sharing their vision in their talks. Special thanks should be addressed to the INSTICC Steering Committee whose invaluable work made possible this event.

We wish you all an exciting conference and an unforgettable stay in Lisbon, Portugal. We hope to meet you again for the next edition of VISAPP, details of which will be shortly available at http://www.visapp.visigrapp.org.

José Braz  
Escola Superior de Tecnologia de Setúbal, Portugal

Sebastiano Battiato  
University of Catania, Italy