

# FOREWORD

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This book contains the proceedings of the 12th International Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2017) which was organized and sponsored by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC), in cooperation with ACM SIGGRAPH, AFIG and Eurographics.

The proceedings here published demonstrate new and innovative solutions and highlight technical problems in each field that are challenging and worthwhile being disseminated to the interested research audiences.

VISIGRAPP 2017 was organized to promote a discussion forum between researchers, developers, manufacturers and end-users, about the conference's research topics and to establish guidelines in the development of more advanced solutions.

We received a high number of paper submissions for this edition of VISIGRAPP, 400 in total, with contributions from all five continents. This attests to the success and global dimension of VISIGRAPP. To evaluate each submission, we used a double-blind evaluation method and each paper was reviewed by two to six experts from the International Program Committee.

The IPC selected for oral presentation and for publication as full papers 14 papers from GRAPP, 5 for HUCAPP, 16 papers for IVAPP, and 61 papers for VISAPP, which led to a result for the full-paper acceptance ratio of 25% and a high-quality program. Apart from the above full papers, the conference program also features 113 short papers and 76 poster presentations. We hope that these conference proceedings, which are submitted for indexation by Thomson Reuters Conference Proceedings Citation Index, INSPEC, DBLP, and EI, will help the Computer Vision, Imaging, and Computer Graphics communities to find interesting research work. Moreover, we are proud to inform that the program also includes four plenary keynote lectures, given by internationally distinguished researchers, namely Jack van Wijk (Eindhoven University of Technology, Netherlands), Holly Rushmeier (Yale University, United States), Jean-Daniel Fekete (INRIA, France) and Nadia Magnenat-Thalmann (University of Geneva, Switzerland), thus contributing to increase the overall quality of the conference and to provide a deeper understanding of the conference's interest fields.

Furthermore, a short list of the presented papers will be selected to be expanded into a forthcoming book of VISIGRAPP Selected Papers to be published by Springer during 2017 in the CCIS series. All papers presented at this conference will be available at the SCITEPRESS Digital Library. Two awards are delivered at the closing session, to recognize the best conference paper and the best student paper.

We would like to express our thanks, first of all, to the authors of the technical papers, whose work and dedication made possible to put together a program that we believe to be very exciting and of high technical quality. Next, we would like to thank the 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 this event possible.

We wish you all an exciting conference and an unforgettable stay in Porto, Portugal. We hope to meet you again for the next edition of VISIGRAPP, details of which are available at <http://www.visigrapp.org>.

### **Conference Chair**

José Braz, Polytechnic Institute of Setúbal, Portugal

### **GRAPP Program Co-chairs**

Ana Paula Cláudio, BioISI, Faculdade de Ciências, Universidade de Lisboa, Portugal

Dominique Bechmann, CNRS-Université de Strasbourg, France

### **HUCAPP Program Co-chairs**

Paul Richard, University of Angers, France

Takehiko Yamaguchi, Tokyo University of Science, Japan

### **IVAPP Program Co-chairs**

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