Preface

Virtual Reality (VR) is a simulation in which computer graphics is used to create a realistic-looking where the feeling of immersion and realistic presence is very high.

Augmented Reality (AR) technology allows for the real-time fusion of computer-generated digital contents with the real world with the aim of enhancing the users' perception and improve their interaction or assist them during the execution of specific tasks.

Human–Computer Interaction technology (HCI) is a research area concerned with the design, implementation, and evaluation of interactive systems that make more simple and intuitive the interaction between user and computer.

This book contains the contributions to the 4th International Conference on Augmented Reality, Virtual Reality and Computer Graphics (SALENTO AVR 2017) that has held in Ugento (Italy) during June 12–15, 2017. We cordially invite you to visit the SALENTO AVR website (http://www.salentoavr.it) where you can find all relevant information about this event.

SALENTO AVR 2017 intended to bring together researchers, scientists, and practitioners to discuss key issues, approaches, ideas, open problems, innovative applications, and trends on virtual and augmented reality, 3D visualization, and computer graphics in the areas of medicine, cultural heritage, arts, education, entertainment as well as industrial and military sectors.

We are very grateful to the Program Committee and local Organizing Committee members for their support and for the time spent to review and discuss the submitted papers and doing so in a timely and professional manner. We would like to sincerely thank the keynote and tutorial speakers who willingly accepted our invitation and shared their expertise through illuminating talks, helping us to fully meet the conference objectives.

In this edition of SALENTO AVR, we were honored to have the following keynote speakers:

- Mariano Alcañiz, Universitat Politècnica de València, Spain
- Vincenzo Ferrari, Università di Pisa, Italy
- Fabrizio Lamberti, Politecnico di Torino, Italy
- Roberto Scopigno, ISTI-CNR, Pisa, Italy
- Fabrizio Nunnari, German Research Center for Artificial Intelligence (DFKI), Germany

We extend our thanks to the University of Salento for the enthusiastic acceptance to sponsor the conference and to provide support in the organization of the event.

We would also like to thank the EuroVR Association, which has supported the conference since its first edition, by contributing each year to the design of the international Program Committee, proposing the invited keynote speakers, and spreading internationally the announcements of the event.

SALENTO AVR attracted high-quality paper submissions from many countries. We would like to thank the authors of all accepted papers for submitting and presenting their works at the conference and all the conference attendees for making SALENTO AVR an excellent forum on virtual and augmented reality, facilitating the exchange of ideas, fostering new collaborations, and shaping the future of this exciting research field.

For greater readability of the two volumes, the papers are classified into five main parts that include contributions on:

– Virtual Reality
– Augmented and Mixed Reality
– Computer Graphics
– Human–Computer Interaction
– Applications of VR/AR in Medicine
– Applications of VR/AR in Cultural Heritage

We hope the readers will find in these pages interesting material and fruitful ideas for their future work.

June 2017   Lucio Tommaso De Paolis
                                                                      Patrick Bourdot
                                                                     Antonio Mongelli