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Computer Aided Surgery

7th Asian Conference on Computer Aided Surgery
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Proceedings

Volume Editors

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Preface

The 7th Asian Conference on Computer-Aided Surgery, ACCAS 2011, was held at the Bangkok Convention Center, Central World, Bangkok, Thailand August 26–27, 2011.

The Asian Conference on Computer-Aided Surgery (ACCAS) is an international scientific congress focusing on the advancement of new technologies for medical services. The ACCAS series provides a forum for academic researchers, clinical scientists, surgeons and industrial partners to exchange new ideas, techniques, and the latest developments in the field. The ACCAS has remained a truly international meeting, bringing together researchers from all fields related to medical activity visualization, simulation and modeling, virtual reality for computer-aided surgery (CAS), image-guided diagnosis and therapies, CAS for minimally invasive intervention, medical robotics and instrumentation, surgical navigation, clinical application of CAS, telemedicine and telesurgery, and CAS education. The ACCAS is also interested in promoting collaboration among people from different disciplines and different countries in Asia and other parts of the world.

As a high-impact workshop, the ACCAS continues to grow. For this year, the ACCAS focused on the topic of “Improving Medical Services with Emerging and Frontier Technologies”. Not only computer-related but all advanced technologies were introduced and presented in order to share new ideas with surgeons and other doctors in all fields of medicine. We received a record of 67 submissions from Japan, Korea, China, Thailand, and other Asian countries. These papers were presented in double-track oral and poster sessions, which covered medical robotics, medical imaging, surgical navigation, biomedical signal processing and instrumentation, virtual reality in medicine, simulation and modeling, and diagnostic tools in biomedical engineering.

This is the first time for us to use Springer Proceedings in Information and Communications Technology (PICT) to publish the ACCAS conference proceedings. For this volume, we selected 16 papers on the basis of the recommendations of session chairs and the Award Selection Committee of ACCAS 2011. All papers were resubmitted and reviewed again by up to three reviewers. The review process was kept to a very tight schedule, and we appreciate the commitment and professionalism shown by all of those who took part.

Organizing ACCAS 2011 was very much a team effort, and we are extremely grateful to Professor Soottiporn Chittmittrapap, the General Chair, who organized this successful conference, Prof. Somkiat Wattanasirichaigoon, the General Co-chair, who helped organize the conference, Prof. Jackrit Suthakorn, the Program Chair, who tirelessly spent his valuable time arranging the technical program and session chairs, Prof. Niyom Laoopugsin, the Scientific Exhibition Chair, who provided full support in organizing the scientific and commercial

exhibitions, Miss Choosri Keedumrongkool, the Conference Secretariat, who compiled the list of abstracts and had the Program and Abstract Book published, and all members of the Organizing Committee and the Scientific Committee for their hard work on this well-organized conference.

We would also like to thank the invited speakers Professor Yoshiyuki Sankai from the University of Tsukuba in Japan for his lecture on advanced robotics, and Professor Pairash Thajchayapong from the National Science and Technology Development Agency in Thailand, Professor Jackrit Suthakorn and Professor Sunai Leewansangtong from Mahidol University in Thailand, and Dr. Tassanai Parittotokkaporn from Srinakharinwirot University in Thailand for their inspiring and entertaining presentations on computer-aided surgery.

It was our great pleasure to welcome the attendees to Bangkok for this year's ACCAS conference. For those who were not able to join us, we hope this volume will serve as a valuable reference. The 8th Asian Conference on Computer-Aided Surgery will be held in Beijing, China, and will be a 2-day conference May 26–30, 2012, in conjunction with the World Congress on Medical Physics and Biomedical Engineering 2012. We look forward to seeing you there.

December 2011

Takeyoshi Dohi
Hongen Liao

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