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# Medical Imaging and Augmented Reality

4th International Workshop  
Tokyo, Japan, August 1-2, 2008  
Proceedings

## Volume Editors

Takeyoshi Dohi  
The University of Tokyo  
Department of Mechano-Informatics  
Tokyo, Japan  
E-mail: takdohi@i.u-tokyo.ac.jp

Ichiro Sakuma  
The University of Tokyo  
Department of Precision Engineering  
Tokyo, Japan  
E-mail: sakuma@bmpe.t.u-tokyo.ac.jp

Hongen Liao  
The University of Tokyo  
Department of Bioengineering  
Tokyo, Japan  
E-mail: liao@bmpe.t.u-tokyo.ac.jp

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# Preface

The 4th International Workshop on Medical Imaging and Augmented Reality, MIAR 2008, was held at the University of Tokyo, Tokyo, Japan during August 1–2, 2008.

The goal of MIAR 2008 was to bring together researchers in medical imaging and intervention to present state-of-the-art developments in this ever-growing research area. Rapid technical advances in medical imaging, including its growing application in drug/gene therapy and invasive/interventional procedures, have attracted significant interest in the close integration of research in the life sciences, medicine, physical sciences, and engineering. Current research is also motivated by the fact that medical imaging is moving increasingly from a primarily diagnostic modality towards a therapeutic and interventional aid, driven by the streamlining of diagnostic and therapeutic processes for human diseases by means of imaging modalities and robotic-assisted surgery.

The impact of MIAR on these fields increases each year, and the quality of submitted papers this year was very impressive. We received 90 full submissions, which were subsequently reviewed by up to five reviewers. Reviewer affiliations were carefully checked against author affiliations to avoid conflicts of interest, and the review process was run as a double-blind process. A special procedure was also devised for papers from the universities of the organizers, upholding a double-blind review process for these papers. The MIAR 2008 Program Committee finally accepted 44 full papers. For this workshop, we also included three papers from the invited speakers covering registration and segmentation, virtual reality, and perceptual docking for robotic control. The meeting consisted of a single track of oral/poster presentations, with each session led by an invited lecture from our distinguished international faculty.

Running such a workshop requires dedication, and we appreciate the commitment of the MIAR 2008 Program Committee and reviewers who worked in putting together this workshop. We are grateful to everyone who participated in the review process; they donated a large amount of time and effort to make these volumes possible and insure a high level of quality. We thank the invited speakers Makoto Hashizume from Kyushu University, Japan, Koji Ikuta from Nagoya University, Japan, Nassir Navab from Technische Universität München (TUM), Germany, Terry Peters from the University of Western Ontario, Canada, Stephen Wong from Methodist Hospital-Weill Cornell Medical College, USA, and Guang-Zhong Yang from Imperial College, London, UK. A series of sponsors helped make the conference possible, and for this they are thanked.

It was our great pleasure to welcome this year's MIAR attendees to Tokyo, which is an ideal center for exploring history and culture, and for natural beauty as well as for shopping. Tokyo also boasts 240 art museums and galleries and more than 270 parks and gardens, drawing a large crowd of visitors. Tokyo is

a multicultural metropolis with both modern and traditional Japanese features and we trust that the attendees took the opportunity to explore many different aspects of the city in addition to attending the workshop.

For those who were unable to attend, we hope this volume will act as a valuable reference to the MIAR disciplines, and we look forward to meeting you at future MIAR workshops.

August 2008

Takeyoshi Dohi  
Ichiro Sakuma  
Hongen Liao

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