Welcome to the IEEE Symposium on 3D User Interfaces 2011 (3DUI 2011), taking place in Singapore at the SUNTEC International Convention Center on March 19–20, 2011. The symposium is co-located with IEEE Virtual Reality 2011 and the International Symposium on VR Innovation 2011. 3DUI 2011 is the sixth international symposium focused on the topic of three-dimensional user interfaces. Although a recent area of research, 3DUI is already a very well established topic and is rapidly expanding. This area has emerged from many different disciplines, including virtual and mixed reality, human-computer interaction, computer graphics, cognitive and perceptual psychology, and 3D games.

The program chairs received 44 submissions (25 papers and 19 technotes) in all areas of 3D UIs. Each paper or technote was reviewed by at least two members from the international program committee and two external referees. The process was double-blind. The primary reviewers provided summaries and recommendations after a discussion phase among the expert reviewers. The program chairs accepted 9 papers and 6 technotes, which corresponds to an acceptance rate of 34%. The accepted papers and technotes cover a wide range of topics in 3D user interfaces from the design of new input devices and techniques to the evaluation of user performance for 3D interaction tasks, in various technological contexts such as mobile, multi-touch systems, video games, mixed-reality platforms and immersive Virtual Reality. The proceedings also include two page presentations for each of the 12 posters presented during the symposium.

We are pleased to welcome Dr. Richard Marks from Sony US R&D as the keynote speaker this year. He will address 3D spatial interaction in the entertainment industry. This year, 3DUI also hosts for the second time a contest, the 3DUI Grand Prize, where teams compete to demonstrate the efficiency of the interaction techniques they have imagined to complete a given 3D interaction task. We received 8 entries to the contest, and these designs are included as two page presentations in the proceedings.

We would like to thank all people who made 3DUI 2011 possible. Special thanks go to the program committee members who donated their time to ensure a fair selection process in a very short review period. Additional thanks go to the external reviewers for their insightful and thorough reviews. We want to thank the 3DUI contest chairs Pablo Figueroa, Evan Suma, and Michael Cohen who handled the hard job of managing the 3DUI contest. Similarly, we thank the poster chairs Daniel Acevedo and Tim Marsh for handling the poster program, and the web chair Kouta Minamizawa for maintaining the 3DUI 2011 website. We also acknowledge the support by IEEE, the IEEE Visualization and Graphics Technical Committee, as well as the VR steering committee. Most of the organization of IEEE 3DUI as well as local arrangement is shared with IEEE VR. We are grateful to Ryohei Nakatsu and the IEEE VR organizing committee for taking care of the organization of IEEE 3DUI 2011. Many thanks to James Stewart of Precision Conference Systems for his support of the reviewing process. Thanks also to Torsten Möller and especially Meghan Haley for managing the printing process. Finally, we thank all the authors for their excellent submissions, without which this symposium could not exist. We hope that this symposium will continue to connect researchers of all backgrounds in 3D user interface research and be enjoyable, interesting and stimulating for the participants. Please enjoy the 3DUI 2011 Symposium!