Welcome to the IEEE Symposium on 3D User Interfaces 2017 (3DUI 2017), taking place in Los Angeles, California, on March 18th-19th, 2017.

We have extreme pleasure to be co-located with IEEE Virtual Reality. 3DUI 2017 is the 12th meeting of this international symposium focused on the topic of three-dimensional user interfaces. 3DUI as a research area emerged from many different disciplines, including virtual, augmented, and mixed reality, human-computer interaction, mobile computing, computer graphics, cognitive and perceptual psychology, and games. IEEE 3DUI 2017 Symposium is the year of the 3D user interfaces. Since IEEE 3DUI 2016, there has been an explosion of new technology that requires 3D user interface solutions. There are therefore many open 3D user interface research questions and more new technologies required.

This year, the program chairs received 88 submissions (47 long papers and 41 technotes) in all areas of 3DUI. The number of submissions was again increased since last year. Each submission was reviewed in a double-blind way by at least four reviewers: two reviewers from members of the international Program Committee, and two reviewers chosen as experts from the broader research community. The Program Committee was created from world leading experts in many different disciplines of 3DUI.

The primary reviewers additionally provided meta-reviews and recommendations after a discussion phase among the reviewers. The program chairs accepted 15 long papers and 9 technotes, which corresponds to an acceptance rate of 32% for long papers and 22% for technotes. In addition, 5 long papers were accepted as technotes, which results in an overall acceptance rate of 33%.

These papers cover a wide range of topics including 3D interactions, from navigation and locomotion, multimodal and multisensory techniques, to using your fingers and touch, to 3D selection and manipulation techniques using gestures, to applications of all these to solve real-world problems. This year the five keywords authors used most often to define their work were: 3D Interaction, 3D Navigation, Perception, Collaborative Interaction, and User Studies.

The proceedings also include two-page abstracts for each of the 27 posters presented during the symposium. In addition this year, we proposed a call for late-breaking posters, which provide authors a way to present their latest work in the regular poster session but without abstract publication.

We are very pleased to announce this year’s Keynote address will be given by Jun Rekimoto (PhD Tokyo Institute of Technology). He is a Professor in the Interfaculty Initiative in Information Studies at The University of Tokyo. He is also Deputy Director of Sony Computer Science Laboratories where he formed and directed the Interaction Laboratory. His research interests include human-computer interaction, computer augmented environments and computer augmented human. He invented various innovative
interactive systems and sensing technologies, including NaviCam (a hand-held AR system), CyberCode (the world’s first marker-based AR system), Augmented Surfaces, HoloWall, and SmartSkin (two earliest representations of multi-touch systems). He received iF Interaction Design Award in 2000, the Japan Inter-Design Award in 2003, iF Communication Design Award in 2005, Good Design Best 100 Award in 2012, Japan Society for Software Science and Technology Fundamental Research Award in 2012, and ACM UIST Lasting Impact Award. In 2007, he was also elected to ACM SIGCHI Academy.

This year, 3DUI also hosts for the 3DUI Contest, where teams compete to demonstrate their creativity in producing a 3DUI for an Augmented Reality exhibit of constructive art. We received 8 submissions to the contest, and 7 will be included in the final judging. These seven are included as two-page abstracts in the proceedings, and will present their setups for the attendees of 3DUI to see in live demonstrations in Los Angeles.

We would like to thank all people who made 3DUI 2017 possible. Special thanks go to the Program Committee members who donated their time to ensure a fair selection process during a very short review period. Additional thanks go to the external reviewers for their insightful and thorough reviews.

We also want to thank Christoph Borst, Gerd Bruder and Daisuke Iwai who managed the poster submissions process, and the 3DUI contest chairs Rongkai Guo, Ryan P. McMahan and Benjamin Weyers who handled the hard job of managing the 3DUI Contest. Similarly, we thank Ferran Argelaguet Sanz for being the Web Chair, and Géry Casiez, Thuong Hoang and Francisco Ortega for being 3DUI 2017 publicity chairs. We also acknowledge the support of IEEE, the IEEE Visualization and Graphics Technical Committee (VGTC), as well as the IEEE 3DUI Steering Committee. Most of the organization of IEEE 3DUI as well as local arrangement is shared with IEEE VR. We are therefore grateful to the IEEE VR organizing committee for taking care of the organization of IEEE 3DUI 2017.

Finally, we thank all the authors for their outstanding submissions, without which this symposium could not occur. We hope that this symposium will continue to unite researchers from all backgrounds of 3D user interface research and be gratifying, fascinating and inspiring for the participants.

Please enjoy the IEEE 3DUI 2017 Symposium!

IEEE 3DUI 2017 Symposium Chairs
Maud Marchal, Robert J. Teather, Bruce H. Thomas