Ming C. Lin

University of North Carolina at Chapel Hill

William Sherman Desert Research Institute

Anthony Steed University College London On behalf of the program committee, we are pleased to present the program for the IEEE Virtual Reality Conference 2007 (VR 2007). This year's program consists of twenty-six full papers and fifteen research sketches, three panel discussions and eighteen poster presentations and research demonstrations. We are also very pleased that our keynote presentation will be given by James Foley of the Georgia Institute of Technology. In addition to the core program, the conference also offers both tutorials and workshops prior to the main event. The IEEE Symposium on 3D User Interfaces is also co-located with IEEE VR 2007.

This year, the Program Committee received nearly 160 submissions, a record number in the history of the IEEE Virtual Reality Conference. The acceptance rate for full papers was 20%. Each paper was reviewed by at least two secondary reviewers from the international program committee and two external reviewers. The review summary written by the primary reviewer provided the basis for the face-to-face discussion at the program committee meeting, where the final decisions were made. The selected papers and research sketches cover a variety of topics ranging from perception and human factors, augmented and mixed reality, novel 3D user interface design, modeling and simulation, distributed and networked VR, tracking technology, systems and applications, multi-sensory interaction, scene complexity management, to computer graphics techniques. The panels feature both theories and applications, as well as forward-looking discussions on new trends and current controversies. Each panel is organized by an experienced researcher/practitioner and is intended to provide insights to the future needs of VR research and applications.

We wish to thank the members of the international program committee and the external reviewers for their insightful and thorough reviews of the submitted papers in a very short review period. We are especially grateful to Meghan Haley Clarke, Torsten Möller, and the IEEE Publication Staff, who assisted in compiling this attractive volume of proceedings. We would also like to express our gratitude to James Stewart of Precision Conference Solutions for supporting the conference submission website, to Tobias Höllerer for hosting the Program Committee meeting at UC Santa Barbara, and to Doug Bowman for his support throughout.

IEEE Virtual Reality is an eminent forum for dissemination of the latest research results in virtual environments. The goal of the conference is to provide an opportunity for researchers in virtual reality and applications to interact with one another, share new results, and discuss emerging directions for the field. We hope that this conference will be an enjoyable, stimulating, interesting and thought-provoking event for the participants, and that it will continue to play an important role in fostering a larger community of researchers by creating an environment conducive to the exchange of ideas and information related to virtual environments.