Message from the ISMAR 2022 Science and Technology Journal Program Chairs and TVCG Guest Editors

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In this special issue of *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, we are pleased to present the journal papers from the 21st IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2022), which will be held as a hybrid conference between October 17 and 21, 2022 in Singapore. ISMAR continues the over twenty year long tradition of IWAR, ISMR, and ISAR, and is the premier conference for Mixed and Augmented Reality in the world.

There are 35 papers in this special issue, which were selected from 162 submissions, for an acceptance rate of 21.60%. Of these 162 submissions, 4 submissions were desk rejected and 4 submissions were quick rejected. These papers were either not anonymized or did not contain enough detail to replicate the work. In total, 154 papers went out for full review. They all received four or more reviews. Each paper has an overall score calculated as the mean of the reviewers' scores. Reviewers rated each submission on a scale from one to six.

As program chairs we aimed for the highest possible reviewing standards and conducted a decision process that aimed for final decisions in a fair, rigorous, and transparent way. There was a single paper submission category, papers from 4 to 9 pages in length, plus 2 pages of references. All submissions underwent a review process that encompassed two reviewing stages, overseen by a coordinator from the Program Committee (PC), which comprised 37 internationally renowned experts from the Asia-Pacific region, the Americas, and Europe. After PC members had declared their conflicts and provided their preferences, the program chairs assigned coordinators. For every PC member, as well as the program chairs, for every paper where they had a conflict of interest, both the reviewer assignments and reviewer names were hidden. We used a double-blind process to allow for a fairer reviewing process. Thus, the external reviewers were not aware of the identity of the authors.

After all reviews were received, authors were permitted, though not required, to submit a rebuttal. During the rebuttal phase reviewers were able to read other reviews. After the rebuttal phase an online discussion phase among the reviewers started, in which the reviewers for each paper came to a consensual initial recommendation for that submission among the three possibilities: conditionally accept, reject, or discuss with additional readers. For each of the papers that were recommended for discussion, an additional reviewer from the PC was assigned to provide an extra review. After additional reviews were received the program chairs convened for a video-chat meeting, where a consensus agreement was reached on bulk rejected submission. The bulk reject category consisted of submissions below a defined average score and no single score higher than a defined threshold. All remaining submissions were discussed among the chairs in further video-chat meetings. Note that, for each submission, only program chairs without a conflict of interest with the paper joined the discussion.

Following its conditional acceptance, each paper then went through a minor revision cycle, and was assessed a second time by its primary reviewer and the program chairs to check whether the final version satisfactorily addressed reviewer concerns. Wherein, a paper was asked to add content by which the paper length exceeds our original page limit. All papers were then subjected to a thorough IEEE CrossCheck review to check for plagiarism. Finally, the papers recommended for acceptance to *TVCG* were forwarded to the *TVCG* board for their consideration and approval.

Many individuals have contributed a great deal of time and energy towards making the technical program of ISMAR 2022 a success. We would like to thank the authors of all submitted papers, the members of the Program Committee, and the 326 external reviewers. We also wish to acknowledge James Stewart for his outstanding support with the PCS system, and we would also like to thank the Publications Chairs Mohammed Safayet Arefin, Xinxing Xia and Weitao Song for collecting materials and assisting in the production of this special issue. We warmly thank the members of the ISMAR Steering Committee for their continuing support, Klaus Mueller and Doug Bowman for support and advice as *TVCG* liaisons, the General Chairs, Franck Guan, Yiyu Cai and Michele Fiorentino for their support throughout the entire process, and all the ISMAR community members. We also thank the previous IEEE ISMAR and IEEE VR program chairs for their contributions to the selection process and this message.