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In this special issue of *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, we are pleased to present a subset of papers from the 29th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2022), held virtually March 12–16, 2022, in Christchurch, New Zealand.

These papers represent a range of different forms of contributions to our discipline: methodological papers, technology papers, application papers, and system papers. The topics covered include tracking and sensing, novel display technologies, user perception, avatar and embodiment, user interaction, collaboration in virtual and augmented reality, to name a few.

There are 29 papers in this special issue, which were selected from a total of 189 submissions, for an acceptance rate of 15.3%. The number of submissions is similar to last year, reflecting the great interest and activity in the fields of virtual reality, augmented reality, and 3D user interfaces. Each of the papers in this special issue went through a rigorous two-round review process. In the first round, each paper was assigned a primary and secondary reviewer, from a pool of 53 international program committee members. These assignments were based on a combination of bidding and computed best-match algorithms based on committee members' uploaded sample papers. During an initial assessment 15 papers were desk rejected due to a violation of the submissions guidelines. Then, the primary and secondary reviewers assigned at least two external experts. Primary, secondary and external reviewers all performed extensive reviews of each assigned paper, resulting in at least four reviews per submission. After these reviews were completed, an online discussion phase ensued in which the reviewers for each paper came to a consensus on an initial recommendation for that submission among the three possibilities: conditionally accept, reject, or discuss with additional readers. The program chairs then convened for a preliminary video-conference meeting, where a consensus agreement was reached on the initial partitioning of the

full set of submissions, based on frequent exchanges with the primary reviewers as needed. At this meeting, final decisions were taken on the papers in the “clear accept” and “clear reject” categories. For each of the papers remaining in the “discuss” category, the program chairs selected an additional member of the international program committee as an additional reviewer. After a one-week period, the program chairs re-convened for a second online meeting, and reached final decisions on the remaining submissions, again relying on the consensus of recommendations from the primary, secondary, and external reviewers. Finally, the papers recommended for conditional acceptance to *IEEE TVCG* were forwarded to the *TVCG* board for their consideration and approval. Following its conditional acceptance, each paper then went through a minor revision cycle, and was assessed a second time by its primary reviewer to check whether the final version satisfactorily addressed reviewer concerns. Two papers were asked to add content causing the paper lengths to exceed our original page limit. All papers were then subjected to a thorough IEEE CrossCheck / iThenticate review to check for plagiarism.

Many individuals contributed a great deal of time and energy towards the success of this special issue. We would like to thank the many authors of submitted papers for sending their work for consideration to IEEE VR and *TVCG*, as well as the 53 members of the international program committee and the 243 external reviewers for their many hours of dedicated efforts to select the exceptional papers that appear here. We would also like to acknowledge James Stewart for his reliable assistance with the PCS reviewing system and Lisa O'Conner for assistance with IEEE Conference Publishing Services. We warmly thank the Virtual Reality Steering Committee for their valuable advice and leadership. We are also grateful to Klaus Mueller, the Editor-in-Chief of *TVCG*, as well as Doug Bowman, the Associate Editor-in-Chief, for making this special issue possible.