CALL FOR PAPERS/POSTERS/DEMOS

The ACM Symposium on Virtual Reality Software and Technology (VRST) is the premier international symposium for the presentation of new research results, systems, and techniques among researchers and developers on augmented, virtual and mixed reality (AR/VR/MR, XR for short) software and technology.

VRST brings together the main international research groups working on XR, along with many of the world's leading companies that provide or utilize XR systems. VRST 2021 will be held in Osaka, Japan, hosted by Osaka University, from Wednesday, Dec. 8th to Friday, Dec. 10th, 2021. The event is sponsored by ACM SIGCHI and SIGGRAPH.

All sessions will be hosted through an online platform. Some of the sessions will also be held on-site at Osaka University, located in Osaka, Japan. The Osaka area (and nearby regions like Kyoto and Kobe) is quite populous and lively, and there are many places to visit such as historical buildings, lively entertainment areas, and amusement facilities. In addition, the schedule (tentative) is conveniently set up so that the participants can also join the SIGGRAPH Asia 2021 (December 14-17, in Tokyo) in succession.

Main Topics

VRST 2021 welcomes submissions of research papers that relate (but not limited) to the topics below.

- VR/AR/MR(=XR) technology and devices
- Advanced display technologies and immersive projection technologies
- Low-latency and high-performance XR
- Multi-user and distributed XR
- XR software infrastructures

- XR authoring systems

- Human interaction and collaborative techniques for XR

- Input devices for XR

- Tracking and sensing

- Multisensory and multimodal system for XR

- Brain-computer interfaces

- Haptics, smell and taste

- Audio and music processing for XR

- Sound synthesis for XR

- Computer vision and computer graphics techniques for XR

- Immersive simulations in XR

- Immersive analytics

- Modeling and simulation

- Real-time physics-based modeling

- Real-time rendering

- Physically based rendering for XR

- Avatars and virtual humans in XR

- Tele-operation and telepresence

- Performance testing & evaluation

- Locomotion and navigation in virtual environments

- Perception, presence, virtual embodiment, and cognition

- Teleoperation and telepresence

- Computer animation for XR

- XR applications (e.g. training systems, medical systems, etc.)

- XR for fabrication

- Innovative HCI approaches in XR

- Multi-disciplinary research projects involving innovative use of XR

System Contributions

We invite many types of research contributions, including interactive systems.
However, evaluating systems that are built using existing techniques can be difficult.

For example, a system can be built using a known machine learning technique but it can enable entirely new functionality. In this case, reviewers will need to judge the novelty of the new functionality that the system enables without penalizing the work for leveraging an existing technique.

For reference, here's a paper about evaluating interactive systems that reviewers and authors may want to familiarize themselves with:

James Fogarty (2017): Code and Contribution in Interactive Systems Research

Consideration for COVID-19 pandemic

Conducting in-person user studies is still hard under the current COVID-19 pandemic. We also invite papers that do not include user studies but provides other types of appropriate validations to demonstrate their research contributions.

Submission Information

Please use the ACM SIGCHI Conferences Submission System (PCS) to submit your work: https://new.precisionconference.com/vrst2021/

Submission Guidelines:

All accepted papers will be published in the ACM Digital Library in the VRST collection.

Paper Format:

Paper submissions (applied for Full papers and Short Papers) should be anonymous for a double blind review process. By contrast, Poster and Demo submissions do NOT have to be anonymous, and these submissions will be juried by committee members and receive light feedback (up to a few paragraphs in length). All submissions should be prepared in a single column format, using the Word or LaTeX templates from the official ACM Master article template packages and TAPS (see https://www.acm.org /publications/taps/word-template-workflow).

For convenience, we have listed approximate word counts for the single column format

below. See the TAPS webpage for additional guidance on how content length corresponds to the page limits for the final version.

Submission lengths:

Full research paper: ~6750 words single column (final version: max. 9 pages double column + references)
Short paper: ~3300 words single column (final version: max. 4 pages double column + references)
Poster & Demo: ~1200 words single column (final version: max. 2 pages double column + references)

2-column "teaser" figures on the front page are encouraged, but not required for all submissions.

For authors using LaTeX, submit with \documentclass[acmsmall,anonymous,review] {acmart} and then use \documentclass[sigconf]{acmart} for the final version.

Anonymity Guidelines:

Please remove author and institution information from the author list on the title page, remove author information from all paper headers, and remove from the text any clues that would directly identify any of the authors. Please anonymize your PDF file. Note that PDF creator programs may automatically include author information in the file metadata.

Citations of your own published work (including online) must be in the third person, in a manner that is not traceable to the identity of the authors. For example, the wording "in [3], Mountain and River have proposed..." is acceptable, whereas "in [3], we have proposed..." is not. (Where reference [3] is listed explicitly as "Mountain, A. and River, A., Detecting Mountains and Rivers, In Proc. XYZ '16, 721-741.")

Failure to comply with the above requirements will result in an automatic rejection of the paper.

Please refrain from mentioning the name of your institution in the study approval statement. For e.g., do not say "Our study was approved by the IRB board at the University of Excellence" as that reveals your university's name. Similarly, please do not

include an acknowledgements section in your submission.

Supplementary Materials:

Submissions may be (optionally) accompanied by additional materials such as images, videos, or electronic documents. These materials do not form a part of the official submission. They will be viewed only at the discretion of the reviewers. All content should be in a portable format that is unlikely to require the user to download additional programs. For example, you may prefer PDF or HTML for documents, PNG or JPEG for images, and QuickTime or MPEG for videos. The total file size for supplementary materials should not exceed a total of 50MB.

To the extent possible, accepted papers should stand on their own, with the additional material providing supplementary information or confirmation of results. It is, however, appropriate to refer to video footage in the paper.

Policies:

All standing ACM policies, including those on Prior Publication and Simultaneous Submissions, apply to VRST 2021.
https://www.acm.org/publications/policies/simultaneous-submissions

Important Dates

~~July 19 July 15, 2021, 23:59 AoE Papers with all material submission deadline (extended)~~

~~August 15, 2021, 23:59 AoE   Posters and demos submission deadline~~

~~August 31, 2021 Author notification papers, posters and demos~~

~~September 18, 2021 Revised papers, and posters/demos recommended from paper track deadline~~

~~September 24, 2021 Final author notifications for all categories~~

~~October 8, 2021 Camera-ready papers due~~

December 8 - December 10, 2021 Conference in Osaka, Japan + virtual (hybrid)

Contacts

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