

The 18th ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry

December 10th - 12th, 2022 Guangzhou, China



ACM SIGGRAPH VRCAI 2022

An exciting ACM SIGGRAPH VRCAI 2022 awaits participants from both academia and industry all over the world, where fundamental methods, state-of-the-art technologies and innovative applications in the Virtual Reality Continuum (VRC) will be presented and discussed. Virtual Reality Continuum (VRC) emphasises the coexistence and consistency of the virtual world and the real world. Spanning across next-generation info-communication environments like Virtual Reality (VR), Augmented Virtuality (AV), Augmented Reality (AR) and Mixed Reality (MR), VRC is key in the way we define and interact, with and within, our virtual worlds and physical worlds. To advance research in the VRC fields, ACM SIGGRAPH VRCAI 2022 seeks to provide a forum for scientists, researchers, developers, users and industry leaders in the international VRC community to come together to share experiences, exchange ideas and spur one another in the knowledge of this fast-growing field.

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Yang Wen, Shenzhen University, China

Publication

All accepted papers and abstracts will be published in the ACM SIGGRAPH VRCAI 2022 Conference Proceedings and included in the ACM digital library (EI-indexed). Selected papers will be published in Computational Visual Media (Springer), Computer Animation and Virtual Worlds (Wiley), Virtual Reality & Intelligent Hardware (Elsevier), Visual Computing for Industry, Biomedicine, and Art (Springer).

There will be **Best Paper Awards** and **Best Presentation Awards** this year!

Important Dates

• Paper Abstract Due (Optional):	10th Sept., 2022
• Short/Long Paper Submission:	20th Sept., 2022
• Posters/Demos Submission:	25th Sept., 2022
• Paper Acceptance Notification:	20th Oct., 2022
• Camera-ready Paper:	20th Nov., 2022
• Conference Dates:	10th-12th Dec., 2022

Submission Requirements

All papers should use the ACM SIG Proceedings template (use the "sigconf" proceedings template). Please submit the papers to system through link: <http://www.easychair.org/conferences/?conf=vrcai2022>



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CALL FOR PAPERS

We invite original and unpublished submissions of full Papers (8 pages) or short Papers (4 pages), poster and demo abstracts (2 pages) including references. All accepted papers and abstracts will be published in the ACM SIGGRAPH VRCAI 2022 Conference Proceedings and included in the ACM digital library (EI-indexed). All accepted papers will be presented at the ACM SIGGRAPH VRCAI 2022 Conference.

Topics of interests include (but are not limited to):

Fundamentals

- Ubiquitous VR/AR/MR
- Intelligent VR/AR/MR
- Distributed and Collaborative VR/AR/MR
- Machine Learning for VR/AR/MR
- Robotics and Tele-Presence
- Aural, Haptic and Olfactory Augmentation
- Geometrically, Physically and Image Based Modeling
- Real-time Visual Tracking and Registration
- 3D Modeling, Interpretation and Reconstruction
- Multi-resolution and Multi-scale Methods
- Level of Detail, Model Compression and Simplification
- Networking, Streaming, Cloud, Latency and Bandwidth Methods
- Real-time Rendering, Image-based Rendering, and 3D Auditory
- Rendering and Visualization of Large-scale Models
- Procedural, Physically-based or Data-driven Animation
- Avatars and Virtual Community
- Real-time Rendering, Image-based Rendering, and 3D Auditory
- Metaverse
- Immersive Virtual Environments

Interactions and Interfaces

- Collaborative and Interactive Virtual Environment/VR
- Multimodal Interface
- Visual Interface
- Speech Interface
- Haptic/Tactile Interface
- Natural Interface
- 3D Enabled Devices
- Interaction Design
- Sketch-based interfaces
- Social and Interactive Computing and Media
- Interactive Graphic Design
- Interactive Sound Design
- Human Factors and Ergonomics

Applications

- Aerospace
- Architecture, Construction and Building
- Arts
- Education, Virtual Classroom and Learning, and Training
- Engineering and Design
- E-Commerce
- Video Games/Entertainment/Location Based Entertainment
- Virtual Storytelling and Virtual Production
- Visualization
- Geology, Geography and GIS
- Life Science, Medicine and Healthcare
- Manufacturing
- Transportation and Logistics
- Fashion

Systems

- Clustered VR
- High Performance VRC Computing
- Large-scale Simulation
- Immersive and Semi-immersive Systems
- Projection and Display Systems
- Active and Passive Stereo Systems
- 3D Scanner, Digital Mock-up and Reverse Engineering