

FOURTH CALL FOR PAPERS 2021 IEEE World Haptics Conference July 6-9 Virtual (previously Montreal) https://2021.worldhaptics.org

The IEEE World Haptics Conference (WHC) is the premier international conference covering various aspects of haptics including scientific findings, technological developments, and applications. WHC is a joint gathering of the IEEE Haptics Symposium, the Eurohaptics conference and the AsiaHaptics conference, which takes place in alternate years and rotates among North America, Europe and Asia. The conference is a vibrant environment for sharing the most up-to-date research advancements in the field of haptics, leading to new collaborations, fruitful scientific discussions, engagement of young researchers, and charting the future role of haptic technology in enhancing human life.

WHC 2021 will be held as a virtual conference from July 6 to 9, 2021. The conference will use X-CD Technologies' virtual platform to offer an exciting interactive program, including cross-cutting challenges, technical paper oral sessions, work-in-progress poster sessions, IEEE Transactions on Haptics posters, demonstrations, workshops, student innovation challenges, industrial exhibits, and other technical and social activities.

We seek original contributions on all topics in haptics and call for your active participation. New for 2021, the conference includes a track for papers to be presented at WHC and simultaneously published in the IEEE Transactions on Haptics, and the 1-page Work-in-Progress papers will be published in IEEE Xplore.

Type of Contributions:

Work-in-Progress Papers (WIP) – Due April 23, 2021

Highlighting late-breaking results, accepted WIP short papers (1-page extended abstract) will be presented at interactive poster sessions and published in the WHC 2021 proceedings and IEEE Xplore. Detailed instructions are available at <u>https://2021.worldhaptics.org/wip/</u>.

Interactive Demonstrations – Due April 23, 2021

Interactive research demonstrations may showcase any type of haptic devices, software, experiences, or experiments of interest to the haptics community. The demo presentations include on-demand videos and interactive videoconferencing discussion sessions. Presenters are encouraged to show a live demonstration. Detailed instructions are available at https://2021.worldhaptics.org/demos/.

Interactive ToH Posters – Due April 23, 2021

Authors of articles recently published in the IEEE Transactions on Haptics (ToH) are invited to present their work in an interactive poster session. The invitation is open for articles published in 2020 (Volume 13, issues 2-4) or in 2021 (Volume 14, issue 1), plus all articles that are available on IEEE Xplore via Early Access before the application deadline. Detailed instructions are available at https://2021.worldhaptics.org/toh-interactive-posters/.

Sponsorship and Industry Exhibits

Companies are invited to engage with our community by sponsoring the conference and displaying products and services that relate to the field of haptics. Detailed instructions are available at <u>https://2021.worldhaptics.org/sponsors/</u>.

IEEE Transactions on Haptics (ToH) Short Papers – (Deadline passed)

Accepted ToH short papers will be presented at the conference and published also in the journal. Papers not accepted by ToH will be referred to the Conference Editorial Board for their evaluation as technical papers to be presented at the conference. More details are available at <u>https://2021.worldhaptics.org/toh-short-papers/</u>.

Conference Technical Papers – (Deadline passed)

Accepted papers will be presented and published in IEEE Xplore. The maximum paper length is 6 pages including references. More details are available at <u>https://2021.worldhaptics.org/technicalpapers/</u>.

Cross-Cutting Challenges (CCC) – (Deadline passed)

CCC sessions focus on interdisciplinary challenges ("themes") calling for united solutions from the haptics community. The selected themes will feature keynote talks and interactive discussions delivered by experts from science, engineering, and design. More details are available at https://2021.worldhaptics.org/ccc/.

Student Innovation Challenges – (Deadline passed)

The Student Innovation Challenges (SIC) invites teams of undergraduate and/or graduate students to use haptic technology in new, creative ways to solve real-world problems. More details are available at <u>https://2021.worldhaptics.org/sic/</u>.

Workshops and Tutorials – (Deadline passed)

Workshops and tutorials provide a forum for participants to discuss emerging and active research areas. More details are available at <u>https://2021.worldhaptics.org/workshops/</u>.

Important dates

April 16, 2021: Technical paper acceptance notification April 23, 2021: WIP, Demo and ToH Poster submission May 14, 2021: Camera-ready paper submission July 6-9, 2021: Conference (Virtual)

Topics of Interest

- Haptic Interface Design & Control
- Tactile Displays
- Haptic Sensors and Actuators
- Human-Computer Interaction Involving Haptics
- Multi-Modal Systems Involving Haptics
- Tele-operation and Virtual Environments
- Haptic Rendering and Modeling
- Shared Haptic Control and Collaboration
- Human Haptic Perception
- Haptic Psychophysics
- Neuroscience of Touch
- Human-Robot Haptic Interaction
- Haptics in Industrial and Commercial Applications
- Embedded/Ubiquitous Haptics
- Biomechanics and Motor Control
- Other Innovative Uses of Haptics

Social Media & Mailing List

If you would like to receive announcements relating to the 2021 World Haptics Conference, please follow us on Twitter at <u>@ieeewhc</u> or join our mailing list by following the directions posted here: <u>https://2021.worldhaptics.org/mailinglist/</u>.

Inclusion@WHC

We seek to create an inclusive conference for all participants. We are working on several new initiatives for Equity, Diversity, and Inclusion at WHC2021 this year. Please visit Inclusion@WHC at https://2021.worldhaptics.org/inclusion to see the latest updates and provide your input.

General Chairs (chairs@2021.worldhaptics.org) Keyvan Hashtrudi-Zaad, Queen's University, Canada Vincent Levesque, École de technologie supérieure, Canada

Conference Editorial Board (ceb@2021.worldhaptics.org) Jee-Hwan Ryu (Chair), KAIST, Korea Fernando Bello, Imperial College London, UK

Marcia O'Malley, Rice University, USA Seungmoon Choi, POSTECH, Korea

Program Chair (program@2021.worldhaptics.org) Astrid Kappers, Eindhoven University of Technology, The Netherlands