

EuroXR 2021 Application Track

Last Call for Contributions

Last CfC for the Application Track of EuroXR 2021

The **EuroXR** Association (<u>www.euroxr-association.org</u>) cordially invites you to contribute to the Application Track of **EuroXR 2021 Conference**.

CALL FOR CONTRIBUTIONS APPLICATION TRACK

18th EuroXR International Conference https://www.euroxr-association.org/conference2021/

24-26 November 2021
Organized by CNR-STIIMA, Milano, Italy

Once again this year, due to the COVID-19 pandemic, the EuroXR 2021 conference will be held virtually.

We are pleased to announce the 18th EuroXR International Conference - **EuroXR 2021** - taking place on 24-26 November 2021. The conference follows a series of successful European VR/AR conferences taking place since 2004 and known as INTUITION, JVRC and recently EuroVR (Bremen 2014, Lecco 2015, Athens 2016, Laval 2017, London 2018, Tallinn 2019, virtual Valencia 2020). The Institute of Intelligent Industrial Systems and Technologies (STIIMA) of the Italian National Research Council (CNR) is organizing the 2021 edition of this conference.

EuroXR 2021 will bring together attendees from research, industry, and commerce interested in technologies and applications of Extended Reality (XR), including Virtual Reality (VR), Mixed Reality (MR), Augmented Virtuality (AV) and Augmented Reality (AR), and more globally 3D user interfaces, to exchange knowledge and share experiences, new results and applications, enjoy live demonstrations of current and emerging technologies, and form collaborations for future work.

TYPES OF CONTRIBUTIONS

Contributions are organized in three main tracks, as follows.

- 1) Scientific track contributions: SUBMISSIONS CLOSED
- 2) Application track contributions:
 - a) Application talks (2-4 pages abstract): best practices, practical use cases of XR, project results of applications using such technologies in industry and other sectors, actual or potential transfers of academic results, and position papers.
 - b) Application poster (2-4 pages abstract): recently completed XR applied work, application in progress, or unusual applications.
- 3) Demo & Exhibition track (2-4 pages abstract): live demonstrations of past and on-going projects. Technology developers and suppliers, exhibitors, digital artists, and members of the

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commercial XR communities are all invited to exhibit and demonstrate the latest technologies and applications.

Authors submitting contributions to 2.a or 2.b are strongly encouraged to also submit a demonstration and a related abstract to the Demo & Exhibition track.

All accepted abstracts for Application track and Demo & Exhibition track will be published in the Application proceedings of EuroXR 2021 as an ISBN-registered volume edited by VTT Technical Research Centre of Finland Ltd. For reference, the proceedings of last year's conference are available here: https://doi.org/10.32040/2242-122X.2020.T381

JOURNAL INVITATION AND AWARDS

Authors of selected contributions will be invited to submit an extended version of their papers to the open access journal Frontiers in Virtual Environments.

Best contribution awards will be given in each category. For more information on the EuroXR awards and the winners of previous years, please visit the EuroXR 2021 website.

SUBMISSION GUIDELINES

For all categories of the Application Track and for Demo & Exhibition track, submissions have to be uploaded via EasyChair. For further information visit the conference website here!

TOPICS OF INTEREST include, but are not limited to:

Human factors issues

- User studies on all topics related to XR
- Presence, realism, validity and fidelity
- 3D user interfaces and/or 3D interaction metaphors
- Self-representation and embodiment, avatars, virtual humans
- Cybersickness and side effects
- Cost effectiveness and cost efficiency
- Ethical procedures and guidelines
- Cybersecurity, data protection and other legal issues

Technologies

- Virtual reality system architecture
- Collaborative and distributed XR
- Augmented reality and mobile devices
- Augmented Virtuality and tangible interfaces
- Mixed Reality
- Tracking and motion technologies
- Advances in display technologies
- Image-based 3D modeling and rendering
- Realistic rendering of dynamic or complex scenes
- 3D audio rendering and related technologies
- Haptics and force-feedback, algorithms, systems, and devices

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- Real-time modeling & simulation
- Multimodal interaction in immersive environments
- Immersive collaboration: technologies, use cases, management
- Immersive analytics: interactions, models, architectures
- Artificial Intelligence for XR
- Virtual humans for XR

Applications

- Industrial applications
- Aerospace and Transport
- Construction and Architecture
- Manufacturing and Engineering
- Consumer neuroscience
- Organizational neuroscience
- Medical and Rehabilitation
- Product and Process design
- Robotics
- Training and Education
- Cultural heritage
- Creative Practice
- Serious Gaming and Edutainment

MAIN DEADLINES

For the **Application Track** and the **Demo & Exhibition Track**, contributions deadlines are:

- Short abstract submissions for all related categories: Sept 13 Sept 27, 2021
- Notification to authors for all related categories: Oct 4, 2021
- Camera ready for all related categories: Oct 11, 2021

Conference days: November 24-26, 2021

COMMITTEES

General Chairs

Luca Greci (CNR-STIIMA, Italy)
Hideo Saito (Keio University, Japan)
Bruce Thomas (University of South Australia)

Scientific Program Chairs

Mariano Alcaniz Raya (Immersive Neurotechnologies Lab, Spain)
Patrick Bourdot (University Paris-Saclay, CNRS, LISN, VENISE team, France)
Victoria Interrante (University of Minnesota, USA)
Alexander Kulik (Bauhaus University Weimar, Germany)
Steven M. LaValle (University of Oulu, Finland)
Christian Sandor (City University of Hong Kong, China)

Application Program Chairs

Kaj Helin (VTT, Finland)

Andrey Lunev (XR Insight Europe, Amsterdam, The Netherlands)

Jérome Perret (Haption, France & Germany) - Leader of the chair

Lorenzo Capannari (CEO AnotheReality, Italy)

Krzysztof Walczak (Poznań University of Economics and Business, Poland)

Sara Arlati (CNR-STIIMA, Italy) - Local organizer

Demo and Exhibition Chairs

Giannis Karaseitanidis (ICCS, Greece)

Matthieu Poyade (GSA, UK) - Leader of the chair

Arcadio Reyes-Lecuona (University of Malaga, Spain)

Vera Colombo (CNR-STIIMA, Italy) - Local organizer