

Call for Contributions for

Submission:

1. **Inform the Chair:** with the Title of your Contribution.

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=DIGITAL+2021+Special>

Please select Track Preference as **DigitalXR**

3. **Note:** *For 2021, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on-site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track

DigitalXR: XR-Driven Digital Transformation of Design, Training, and Education

Chair

Dr. Wanwan Li, Visiting Assistant Professor-University of South Florida-Tampa, US

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along with

DIGITAL 2021, Advances on Societal Digital Transformation

<http://www.iaria.org/conferences2021/DIGITAL21.html>

November 14 - 18, 2021 - Athens, Greece

In the 21st century, the digital transformation of our society becomes an inevitable trend to change the way people are thinking, working, and learning. Especially, as the advanced technologies in Virtual Reality (VR), Augmented reality (AR), and Mixed reality (MR) are becoming democratic, eXtended Reality XR(VR/AR/MR) somehow reshapes the activities relating to different aspects of peoples' life. Therefore, it is our opportunity and responsibility to brainstorm how to welcome such a digital transformation of our society through these advanced XR technologies.

We are calling for contributions on discussing how XR technologies influence our lives and how to apply XR technologies in different fields, such as XR-based interfaces for artistic or industrial designs, XR-driven approach for training, and XR-directed educational programs, etc.

Nowadays, the challenges of developing user-friendly or human-centered XR programs are about how to introduce a smart interface between humans and computers to improve interactive efficiencies. For example, how to employ optimization-based approaches to help people automatically design things in XR platforms. Or, how to use machine learning (ML) and artificial intelligence (AI) to synthesize immersive virtual scenarios in XR to help people train themselves efficiently. Furthermore, accurate mathematical model-based scientific simulations on XR platforms can be used to educate students about science-related courses such as physics, chemistry, and geology. Also, text-based interface, parametric models, procedural modeling, vision or audio processing, and natural language processing can also be combined with XR technologies to design, model, or improve digital things such as digital communications, digital transportation, digital architecture, and digital multimedia designs, etc.

Moreover, XR technologies open the doors to a wide range of opportunities and new challenges that we would like to address. We encourage contributions ranging from literature reviews, theoretical studies, technical contributions, application developments, to case studies.

Topics include, but not limited to:

- Technical approaches to improve existing XR technologies (such as AI, ML, and optimizations, etc.)
- XR applications on educations (including both natural science education and social science educations)
- XR applications on digital designs (Such as art design, industrial design, and architectural design, etc.)
- XR applications on training (Such as medical training, military training, and public health training, etc.)

Important Datelines

Inform the Chair or Coordinator: As soon as you decide to contribute.

Submission: October 10, 2021

Notification: October 20, 2021

Registration: November 1, 2021

Camera ready: November 1, 2021

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <http://www.iaria.org/format.html> [both LaTeX and .doc templates]
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>
- More information on camera ready preparations will be posted after the paper notifications are sent out.

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaria.org/registration.html>

Contacts

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