

ISSUE

18



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European Association of Extended Reality

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The official newsletter of EuroXR Association



MESSAGE OF THE PRESIDENT OF EUROXR ASSOCIATION



Welcome to the **18th edition of the newsletter of the EuroXR Association**. As you all know, like the rest of the world, the Association underwent a period of transition along with all the unforeseen events arising from the Covid-19 pandemic. It has been a time of reflection and regeneration that has allowed us to have a fresh start full of possibilities of growth and improvement. This newsletter aims to inform all our subscribers about the changes that are happening in the association and to give them a complete update on the important events of our association, including the **19th EuroXR International Conference – EuroXR 2022**, held in Stuttgart, Germany.

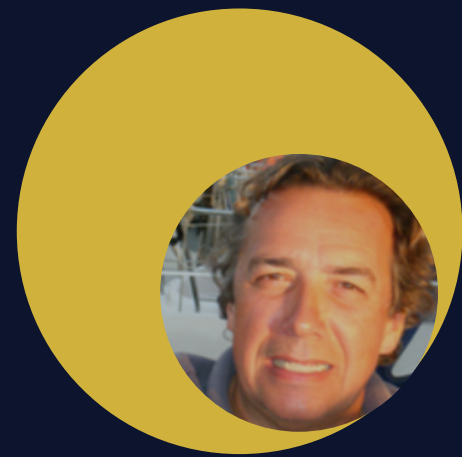
As you know, elections took place in June 2021 to renew the members of the Executive Committee of EuroXR association. In October 2021, this Executive Committee elected a new Executive Board with me as **President of EuroXR**. Therefore, I started this 3 years mandate, after the General Assembly of November 25, 2021, which officially registered the Executive Board changes.

These changes were announced at the end of **EuroXR 2021**, the previous issue of our International Conference, and here I want to thank again the former President of EuroXR, **Marco Sacco**, who did a great job during the many years of managing our association. Marco is now the Vice-President "EU issues & Collaboration".

I want to thank also: **Mariano Alcaniz Raya** who accepted to replace me as Vice-President "Academic issues & Conferences", and the other members of the Executive Board: **Christoph Runde** as Vice-President "Industry & End-users", **Jérôme Perret** as Treasurer and Administrative manager, **Arcadio Reyes Lecuona** as Secretary, and **Monica Gonzalez Galvez** as Communication manager.

One of my first decisions has been to structure the activities of the full Executive Committee around Task forces. Three of them aim to help each Vice-President in their duties, and two are targeting Communication issues and XR Open Forum events. Now, to boost these working structures, I decided and announced during our last General Assembly in Stuttgart, to launch a call for volunteers within the full EuroXR members.

If you want to support our activities for the benefit of the XR community in Europe, become a EuroXR member and join one of these Task Forces!



PATRICK BOURDOT

EuroXR President

euroxr-association.org

19TH EUROXR INTERNATIONAL CONFERENCE -EUROXR 2022



The **19th EuroXR International Conference** took place from the 14th to the 16th of September in Stuttgart, Germany as part of the **XR WEEK** organised by the **Virtual Dimension Center (VDC)**.

XR WEEK reached more than 700 visitors, with 280 registered attendees for EuroXR 2022

EuroXR 2022 welcomed about 75 people per session and more than 100 people for keynotes



The conference content was structured as follow:

- 4 Scientific sessions
- 3 Application sessions
- Fast-Forward + Live parallel sessions:
Scientific Posters and Demonstrations
- XR Open Forum

Check the program



We invited four keynote speakers how delivered great talks:



KEYNOTE SPEAKERS



PROFESSOR
GIUSEPPE RIVA

Neuroscience of XR:
Using Simulative
Technologies for Hacking
our Brain.



PROFESSOR
ANTHONY STEED

Strategies for Designing
and Evaluating Mixed
Reality Experiences



PROFESSOR
BRUCE THOMAS

The Future of UI in XR



**SENIOR SOLUTIONS
ENGINEER**
SIMON NAGEL

Digital Twin with Unity3D

HIGHLIGHTED SESSIONS



Unity

SPECIAL SESSION:

Digital Twin with Unity3D

Concrete use cases and fields of application up to the possible future of the Metaverse and Digital Twins.

Simon Nagel clarified how XR technology will impact industrial companies.

Creating a stage for discussion:

- What is Unity's understanding of the Metaverse and Digital Twins?
- How can digital twins add value and build the bridge between industrial and public Metaverse?
- How will AI change the future of XR content creation?



BIMProve Project

SPECIAL SESSION

XR Based GUI Concept and its applications for BIM Digital Twin Data Visualization

"BIMprove - Improving Building Information Modelling by Realtime Tracing of Construction Processes"

- BIM digital twin visualization in XR - Novel GUI concept
- Daylighting simulation in virtual reality for architecture.
- Immersive Professional Training for the Textile Industry.
- Full-body avatar representation for interior design evaluation experiences.

XR OPEN FORUM



EUROXR 14-16 SEPT

2022
19th EuroXR
INTERNATIONAL CONFERENCE

VR 4 REHAB
SHARE FOR FUTURE CARE

EuroXR Open Forum
VR in Rehabilitation:
VR4REHAB

The complexity of developments and implementation, evidence-based XR use in healthcare

Remco Hoogendijk

Interreg
North-West Europe

EUROXR Stuttgart 2022

Remco Hoogendijk lead partner at **VR4REHAB Interreg North-West Europe** participated as the Guest Speaker in XR Open Forum as part of the 19th EuroXR Conference 2022 in Stuttgart, **chaired by Professor Gabriel Zachmann.**

An enriching discussion on the topic of ***"VR in Rehabilitation, the complexity of developments and implementation, evidence-based XR use in healthcare"*** that resulted in the following outcomes:

- The importance of XR technology for future healthcare sustainability.
- Hardware and Software diversity to apply XR in rehabilitation.
- Main issues: to provide solutions to Hardware management.
- To set up an implementation plan for XR technology for clinicians.
- Needs for EU Medical Device Regulations in XR and medicine.



Professor Gabriel Zachmann
EC member, Leader of the
"XR Open Forum" Task Force

EUROXR 2022 AWARDS



BEST SCIENTIFIC PAPER AWARD

"Evaluation of Point Cloud Streaming and Rendering for VR-based Telepresence in the OR"

Roland Fischer, Andre Mühlenbrock, Farin Kulapichitr,
Verena Nicole Uslar, Dirk Weyhe, Gabriel Zachmann

SCIENTIFIC PAPER HONORARY MENTION AWARD

"Evaluating the Acceptability and Usability of a Head-Mounted Augmented Reality Approach for Autistic Children with High Support Needs"

Valentin Bauer, Tifanie Bouchara, Olivier Duris, Charlotte Labossière, Marie-Noëlle Clément, Patrick Bourdot

BEST APPLICATION PAPER AWARD

"Development, Deployment and Evaluation of Augmented Reality Maintenance Support Applications"

Mario Lorenz, Sebastian Knopp and Philipp Klimant.

BEST APPLICATION POSTER AWARD

"ECHOES from the past through immersive technologie and creative industry"

Eleftherios Anastasovitis, Electra Tsaknaki, Georgia Georgiu,
Spiros Nikolopoulos, Ioannis Kompatsiaris.

BEST DEMOSTRATION AWARD

"Live demo and business case of FIREDRILL - AR evacuation exercises"

Markus Wellmann

“

Winning the Award added more confidence in our research team and raised the standards for our future publications and research results.

”

Leyteris
Anastasovitis

“

The EuroXR Award means that our interdisciplinary research work here at CERTH gets recognized by a world-famous conference and through high competition, and that poses an honor and a motivation for us to continue working in the field of immersive technologies.

”

Electra Tsaknaki

PUBLICATIONS



The proceedings have been collected in two volumes. Special thanks to Springer and VTT for the publications.



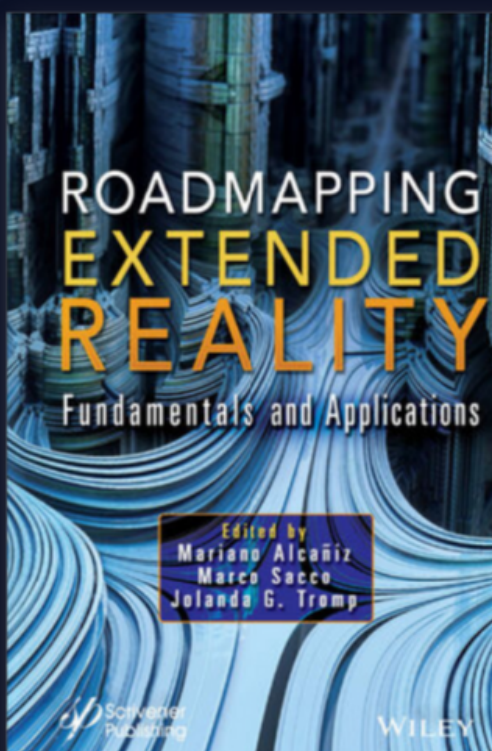
Scientific proceedings
Lecture Notes in Computer Science of Springer



Application & Demo proceedings
VTT book



COORDINATED BY EUROXR ASSOCIATION



ROADMAPPING EXTENDED REALITY

FUNDAMENTALS AND APPLICATIONS
BY

MARIANO ALCAÑIZ
MARCO SACCO
JOLANDA G. TROMP

BUY

EUROXR & IMMERSIVE TECH WEEK COLLABORATION



We are happy to announce that during EuroXR 2022 in Stuttgart, Germany, **Immersive Tech Week** (ITW, previously VRDays Europe) and **EuroXR association** signed a **Memorandum of Understanding (MoU)** to formalize their collaboration.

According to this collaboration, two events are already planned in Rotterdam, The Netherlands:

- **Next XR Open Forum as a session of ITW 2022:** December 1, 2022, from 13:00 to 14:30
- The **20th EuroXR International Conference - EuroXR 2023** - will be welcomed by **ITW 2023:** November 28-30, 2023



Benjamin de Wit, ITW Festival Director - Patrick Bourdot, EuroXR President

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INFORMATION?
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