

**03**

JUNE 2020

# EUROVR NEWSLETTER

*The official newsletter of Euro VR Association*

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## The importance of creating synergies

During the previous months, we realized that the constant change we are facing has permanently affected our lifestyle and our work. More than anything, the world right now needs virtuous cooperation from everyone. For this reason, EuroVR has decided to devote its energies and its commitment to improve and intensify the opportunities to broaden the focus and involvement of its ecosystem stakeholders.

We believe that this is the right time to create synergies at a working level, a powerful phenomenon that allows people to achieve a higher quantity and quality output than if they worked independently. On this base, our Association is expanding and strengthening its collaborations with other entities from the XR sector, involving new figures from the Corporate field, such as AnotheReality (EuroVR May Issue) and with other European Associations (Mimos - EuroVR April Issue; SSVAR - EuroVR May Issue).

Also, EuroVR is currently in the process of creating Special Interest Groups (SIGs), which can provide a mechanism for creating a network where members cooperate to affect or to produce solutions within their particular area of interest.

Synergy is a systemic principle, that explains how a team collective performance is unpredictable based only on its members' performances, on this bases EuroVR encourages members with shared interests to create a network and share information within its larger structure.



Common interest and common values represent the starting points for achieving a virtuous collaboration: finding personal affinities that help working together, seeking opportunities to leverage each other's talents, and consolidating long-lasting alliances.

We invite you and hope you will be part of this new initiative. Organizing a SIG is a great way to start or extend your involvement in the EuroVR Association. EuroVR is willing to make available its already consolidated network and expertise in favor of the new emerging community.

Enjoy reading!

**Marco Sacco,**  
EuroVR President



3D-DIANA Team, 3D Tune-In Toolkit

## Prof. Arcadio Reyes-Lecuona from the University of Málaga

The University of Málaga is part of the Campus International Excellence, "Andalucía Tech" which works in leading areas of research and knowledge transfer and maintains strategic alliances with more than 150 companies. Prof. **Arcadio Reyes Lecuona** is head of the DIANA Research Group of the PAIDI (research, development and innovation planning of the Junta de Andalucía). The group has been working since 1999 on advanced human-machine interfaces, including **Virtual Reality and 3D interaction**, within different research projects with public and private funds.

The **DIANA group** belonged to INTUITION, the Excellence Network of Virtual Reality within the EU's 6th Framework Programme, which was transformed in EuroVR. The group became a founding member of the EuroVR Association since 2010.

**Prof. Arcadio Reyes Lecuona** is head of the **3D-DIANA Team**, which is part of the DIANA Research Group.

The Team is working in 3D interaction and User Experience in Virtual Environments since 2004. They aim at the study and development of Human-Computer Interaction (HCI), and especially VR interaction techniques. Research expertise and interest include: 3D audio spatialisation, 3D interaction with restricted DoF, 3D Interaction in Virtual Environments, Haptic Interaction, Natural Walking Navigation and Presence in VE.

The latest project of the Team is **PLUGGY**. Its focus is the development of a social network for cultural heritage and a AR app for visualization of 3D models of cultural heritage artifacts. Built upon the idea of empowering European citizens to be actively involved in cultural heritage activities, and not only as observers, It will be Europe's first social networking platform for cultural heritage.

### Developed tools:

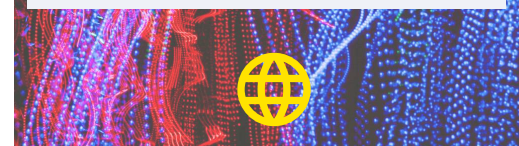
**3D Tune-In Toolkit**, an open source library for 3D audio rendering



**Arcadio Reyes-Lecuona**

Professor at the University of Málaga, teaching Virtual Reality, User Interfaces, Creative Electronics and Electronic Technology for Artistic Applications

*"I was part of the INTUITION NoE and I promoted the participation of the University of Málaga as a founding member of EuroVR. My motivation to be part of EuroVR is to join a network of researchers in the field of VR, with the possibility of exchanging ideas and knowledge in the EuroVR Conference. I'm also interested in contributing to common EU project proposals."*



developed in the 3D Tune-In EU project. The Toolkit allows the design and rendering of highly realistic and immersive 3D audio, the simulation of virtual hearing aid devices and of different typologies of hearing loss.

**hom3r** is a novel 3D viewer for complex hierarchical product models. It implements user-centered interaction mechanisms that deal with occlusion management, navigation and presentation of information linked to 3D geometry.





# LAVAL VIRTUAL

With 20 years of activity **Laval Virtual** can be considered a major facilitator in VR/AR. The mission of Laval Virtual is to **inspire, gather and valorize**, the entire **VR/AR community** of providers, and users in its B2B uses through meeting and discussion platforms and information services. Since 1999, Laval Virtual has established itself as a key facilitator for organisations in the VR/AR sector. It brings together and animates a community of professionals throughout the year, for which it holds shows in Europe and Asia. It is the reference event of this evolution and the European leader in the New Technologies sector and uses of Virtual: Industry, Marketing, Heritage, Medicine, Training Innovation and New Technologies are essential success factors in every sector in terms of development and growth of the business.

## Laval Virtual Center

The Laval Virtual Center is the epicenter of our commitment to virtual reality. The goal is to turn it into a permanent **Virtual and Augmented Reality European hub** and an international reference for immersive technologies' professional uses. The Laval Virtual Center takes advantage of its unique location around which higher education establishments, research laboratories, technology platforms, and uses of virtual reality gravitate. Through services for companies: technological watch and sector-specific intelligence, ideation, ongoing training, research & technology, advice & analysis; any company keen to accelerate its projects in Virtual and Augmented Reality can do it at the Laval Virtual Center.

## Laval Virtual World

Every year the Laval Virtual exhibition is held in Laval, France.

The event is for all of those who wish to develop a greater depth of understanding and expertise in immersive technologies and integrate them into their value chain and predict their development. For the 22nd edition the event had been virtualized, for the first time the conferences, the Awards ceremony, the business meetings took place on a virtual island. The new organization format was essential to respond positively to the difficulties of this historical period. A wonderful opportunity that gathered 11,200 people while staying at home.



**Laurent Chrétien**  
General Manager of Laval Virtual

## CONTACTS



# LATEST NEWS FROM YOUR PROJECTS



The I-SENSE Group of ICCS has a long- standing experience in the design and development of Virtual and Augmented Reality (AR) applications, tailored to support domains, spanning from passenger transport (PASSME), smart water management (NEXTGEN), environment and agriculture (DIONE).

## SMARTFLEX Project I-SENSE Group of ICCS

Recently, in the context of the project **SMARTFLEX**, funded by national and EC funds, the group has developed an AR-assisted application, targeting the key sector of warehouse logistics. The Android-based application, that runs on smart glasses, aims to support the warehouse personnel in the process of picking. Picking is the action of scanning and collecting barcode-identifiable goods within a warehouse or distribution centre, and is traditionally done using hand-held scanners.

The application wishes to substitute this manual scanning process with smart glasses. It has the great advantage of having both hands free for picking, while all the necessary information is presented to the picker in the AR interface of the glasses. This information includes order and item identification, item description and position inside the warehouse. The warehouse personnel is guided at every step of the process through voice commands, while for some types of smart glasses, button-triggered commands are supported.

Through this technology, the warehouse or distribution centre may achieve zero defect operation, with improved efficiency and less strain and workplace accidents for the workers.

For more information on the project please contact:  
Athanasia Tsertou Athanasia.tsertou@iccs.gr



Figure 1 AR-enabled warehouse picking in SMARTFLEX project



Figure 2 Item location, quantity and barcode in the application user interface.



# LATEST NEWS FROM YOUR PROJECTS

## Immersive Technologies for Tourism in Europe: the CHARM project



**CHARM: Immersive Experiences in European Charming Villages** is a project co-financed by European COSME Program that puts together partners from 6 different European countries, representing Destination Marketing Organisations (Catalan Tourism Board, coordinator - ES), Destination Management Companies (Turismo Vivencial - ES, Portgall - PT), Research Centres (NIT - DE), Innovative Software providers (Tour Guide Fox - FI; Swing:It - IT) and a European network (NECSTouR - BE). It will have a duration of 2 years from March 2019 to March 2021.

The project aims to boost tourism flows towards rural areas with low tourism density by **creating innovative, responsible and sustainable tourism products within the 10 European charming villages** that will be part of the CHARM transnational route, while preserving and promoting their historical and traditional heritage, their architecture and landscapes through innovative experiences. The Pilot Villages, i.e. Burg – Reuland (Belgium), Mathildedal and Oravi (Finland), Friedrichstadt and Seiffen (Germany), Borgo La Curinzia (Italy), Rupit and Taull (Spain), Monsaraz and Sortelha (Portugal), have been selected considering common identity features. Each village participates in a capacity building – training session, in order to create a total of **70 new tourism products** engaging more than **110 Small and Medium Enterprises (SMEs)** across the CHARM countries. **EuroVR** in the project is represented by Swing:It (aka Software Engineering Italia Srl, [www.swing-it.net](http://www.swing-it.net)), an innovative Italian SME, provider of XR and Web 2.0 solutions, member of EuroVR association since 2018.

The project is developing a **CHARM Web Platform** (Swing:It is in charge) where the tourists can find all the information about the Charming Villages, look at the products for each of them and decide which ones to book, a **Virtual Reality App** (Swing:It) and an **Augmented Reality App** (Tour Guide Fox), giving to the rural villages and to the travellers new tools to reduce barriers to travel and increase their engagement with the experience. The creation of immersive experiences for visitors through VR and AR, by the Cultural and Creative Industries, represents an added value to the tourism products. In detail, the **VR App** will let the potential visitors to immerse themselves into a virtual reconstruction of elements from the villages/attractions, to explore them with a headset and so understand what to expect and how to orient themselves before they arrive. The **AR App**, instead, will consent the in-place visitors to obtain more information about their visiting experience directly on the screen of their phones.

The **AR App**, in fact, overlays computer-generated images and text

to the real background the visitors see, just by focusing their cameras towards the QR Codes provided for selected attraction of the villages. It will be downloaded by tourists and will be delivering a real amazing and innovative experience thanks to the integration of AR features and the availability of B2C services. The several hundreds of downloads will make it possible to **evaluate the effects of integration of selected technologies and the level of satisfaction of user experience**. The collected feedback from users and operators will also allow to validate positive consequences produced by application of new technologies (to begin with AR/VR) to tourism. **CHARM's goal is to promote this route to local, mid and long-range markets.**

By fulfilling its objectives, CHARM will contribute to the diversification of the tourism offer, to the development of the local economy (mainly job creation and local SME support), to face seasonality, to contribute to decongestion and to furthermore foster territorial cohesion by mitigating tourism concentration.



# ANOTHER REALITY IN SPACIAL COMPUTING

## FULL RANGE OF IMMERSIVE TECHNOLOGIES

We are hardware agnostic and capable of managing the whole spectrum of immersive technologies, from augmented to virtual and mixed reality

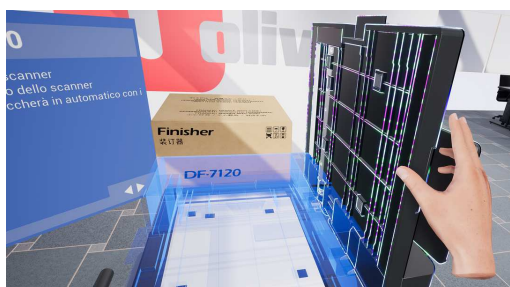
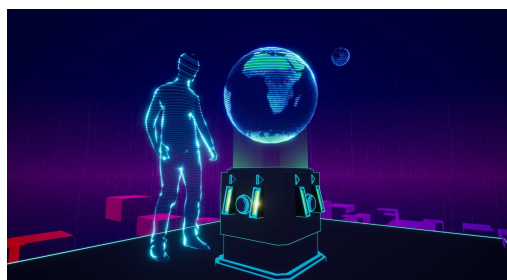


## MULTI-DEVICE SPACIAL COMPUTING

We deploy real-time interactions across **different devices**, from smartphones and desktops to wearable XR devices, including the latest **Virtual Experience Center**, a virtual hub where companies can establish real, emotional relationship with customers and employees.

## SPACS

A SPAtial Components System, AnotheReality's proprietary internal Multiexperience Development Platform (MXDP) for Rapid Application Development of immersive applications



## LONGTIME XR EXPERTISE

We've mastered gaming and real-time interaction for spatial technologies (AR/VR) since 2014. Full realism, no motion sickness.

## EXTENSIVE EXPERIENCE

We've applied natural real-time interaction design and gamification techniques across many use cases and industries, mainly at corporate level.



# LATEST EVENTS

## XR Expo Goes Virtual!

The **4th edition** of the **XR Expo** will go virtual due to the current COVID-19 circumstances. Our **virtual event** will take place on **25-26 June 2020** and will include **Virtual**, **Augmented** and **Mixed Reality** subjects.

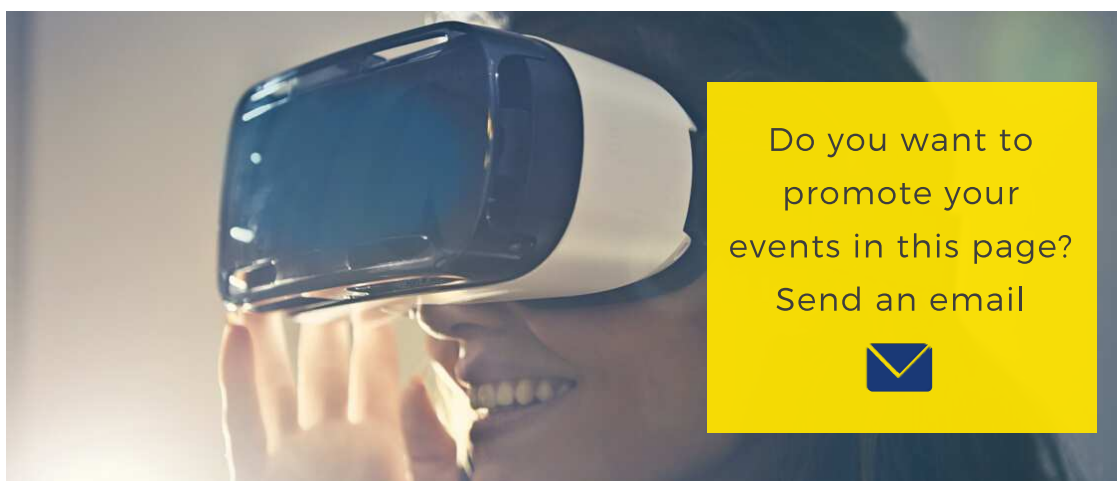
With the help of the interactive event application Converve, exhibitors, sponsors and visitors from around the world now have the possibilities to participate virtual and be part of a special digital experience with the new virtual XR Expo. As a visitor you can experience **virtual presented exhibits, talks and panels** by renowned speakers via webcast, webinar or live streaming. You have the opportunity to create your personal profile online, chat with other event participants, exhibitors or sponsors, or arrange private appointments.



As an exhibitor you have the possibility to book up to 3 workshops (spread over 2 days) to present your topics. Your created content can be presented as webcast, webinar or live stream with your chosen tool, which we will be integrate into our platform as video link (like Zoom, WebEx, Teams, ClickMeeting etc.) or embedded code/chat link.

As a Sponsor & Partner you will not only achieve increased visibility for your company with your logo presence on the XR Expo website, XR Expo social media channels, but also a presence in press releases and in various networks before, during and after the event.

**Register now as visitor, exhibitor, sponsor  
and become a part of our virtual world 2020!**







## EuroVR 2018 Annual Conference in numbers:

**15<sup>th</sup>** Edition



**102** Attendees



**19** Different countries



**80%** Participants satisfaction



UPV, LabLENI, VALENCIA, SPAIN

25 - 27 NOVEMBER 2020

# EuroVR 2020 International Conference:

In partnership with Immersive Neurotechnologies Lab  
Valencia (LabLENI), Spain

1<sup>st</sup>

## CALL FOR CONTRIBUTIONS

We are pleased to announce the **17th EuroVR International Conference** – taking place on **25-27 November 2020** in **Valencia, Spain**. The conference follows a series of successful European VR/AR conferences taking place since 2004.

**EuroVR 2020** will bring together people from **research, industry, and commerce**. Its members include technology developers, suppliers, and all those interested in **Virtual Reality** (VR), **Mixed Reality** (MR), including **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.

[\*\*SUBMIT HERE\*\*](#)



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