



XR SALENTO 2026

International Conference
on eXtended Reality

June 16-20, 2026 – Otranto, Italy

Tuesday 16 June	Wednesday 17 June	Thursday 18 June	Friday 19 June
8 ⁰⁰ - 9 ³⁰ Registration	8 ¹⁵ - 9 ³⁰ Poster Session 1	8 ¹⁵ - 9 ³⁰ Poster Session 2	8 ¹⁵ - 9 ³⁰ Poster Session 3
9 ³⁰ - 10 ³⁰ Conference Opening	9 ³⁰ - 10 ³⁰ Keynote Speaker 2	9 ³⁰ - 10 ³⁰ Keynote Speakers 3	9 ³⁰ - 10 ³⁰ Keynote Speaker 4
coffee break	coffee break	coffee break	coffee break
11 ⁰⁰ - 12 ⁰⁰ Keynote Speaker 1	11 ⁰⁰ - 12 ⁰⁰ Research Showcase	11 ⁰⁰ - 12 ⁰⁰ Demo 3	11 ⁰⁰ - 12 ⁰⁰ Panel 3
12 ⁰⁰ - 13 ⁰⁰ Demo 1	12 ⁰⁰ - 13 ⁰⁰ Panel 1	12 ⁰⁰ - 13 ⁰⁰ Panel 2	12 ⁰⁰ - 13 ⁰⁰ Research Showcase
lunch	lunch	lunch	lunch
14 ³⁰ - 15 ³⁰ Paper Sessions 1	14 ³⁰ - 15 ³⁰ Paper Sessions 3	14 ³⁰ - 15 ³⁰ Paper Sessions 5	14 ³⁰ - 15 ³⁰ Paper Sessions 8
coffee break	coffee break	coffee break	coffee break
16 ⁰⁰ - 17 ⁰⁰ Paper Sessions 2	16 ⁰⁰ - 17 ⁰⁰ Paper Sessions 4	16 ⁰⁰ - 17 ¹⁵ Paper Sessions 6	16 ⁰⁰ - 16 ³⁰ Conference Closing
		17 ¹⁵ - 18 ⁰⁰ Paper Sessions 7	
19 ³⁰ - 21 ⁰⁰ Welcome Cocktail		20 ⁰⁰ - 23 ³⁰ Gala Dinner	

Tuesday June 16, 2026

9,30 - 10,30 **Conference Opening**

Lucio Tommaso De Paolis - General Chair, XR Salento 2026, University of Salento, Italy
Pasquale Arpaia - General Chair, XR Salento 2026, University of Naples Federico II, Italy
Marco Sacco - General Chair, XR Salento 2026, STIIMA-CNR, Italy
Maria Antonietta Aiello - Rector of University of Salento, Italy
Alessandro De Grandi - Nemixar, Italy

10,30- 11,00 *Coffee break*

11,00 - 12,00 **Keynote Speaker 1**

Jesús Gimeno Sancho - *University of Valencia, Spain*
Applied XR in Healthcare Sector: From Computer Graphics to the Operating Room

12,00 - 13,00 **Demo 1**

Nemixar, Italy
Alessandro De Grandi

13,00 - 14,30 *Lunch*

14,30 - 15,30 - Room Ibiscus

Session 1A - Virtual Reality

Chair: Valerio De Luca

[Inducing and Assessing Stress in a VR-Based Learning Environment: A Multimodal Analysis of Subjective and Objective Indicators](#)

Katja Fraedrich, Mirella Moser, Don Tuggener, Susanne Zwinggi, Martin Berger, Johannes Blum, Thomas Keller

[A Virtual Environment based on Babylon.js \(VEB.js\) to Support Engineering Research and Education](#)

Walter Terkaj, Marcello Urgo

[ReEmote: Towards Emotion Representation in VR Through Va.Si.Li-Lab](#)

Patrick Schrottenbacher, Alexander Mehler, Vivienne Bernhardt, Leon Rohe, Giuseppe Abrami

[Enhanced VR-based Product Development Platform by Reinforcement Learning](#)

Qingjin Peng, Hamid Reza Fazeli

14,30 - 15,30 - Room Camelia

Session 1B - Augmented and Mixed Reality

Chair: Daniele Spoladore

[Augmented Reality for Studio Broadcast Systems - from Live Video Switching using Contextual Information to Configuration and Control of Studio Equipment](#)

Nico Balthazar, Jannik Hölper, Jens Herder

[Authenticity Markers in XR: A Conceptual Framework for Immersive Digital Environments](#)

Wibke Weber, Hans-Martin Rall

[PRIO: Probabilistic Room Inference model for mixed reality based on Object co-occurrence detection](#)

Benjamin Georges, Charles Gouin Vallerand, Iza Marfisi, Kevin Bouchard

[Augmented Kitchens: XR-Enabled Communication in Active Domestic Workspaces](#) (*video*)

Okan Efe Öğretmen, Serra Cılızoğlu, Asım Evren Yantaç

14,30 - 15,30 - Room Orchidea

Session 1C - Extended Reality

Chair: *Carola Gatto*

[SAXR: Situated Analytics in eXtended Reality](#)

Philipp Ackermann

[A Multi-Agent XR-AI Prototype for Structuring Context-Bound Spoken Feedback into BIM Issue Workflows](#)

Jaakko Viertiö, Osku Torro, Lydia Murto-Unkila, Tiina Ahola

[Beyond the Path: XR Branching Narrative to Foster Nature Exploration](#)

Luis Fernandes, Paulo Bala, Sandra Olim, Pedro Campos, Mara Dionisio

[Model-Driven Runtime Control of Interaction Behavior in Distributed XR Systems](#)

Štefan Korečko, Branislav Sobota, Martin Čížmárik, Timotej Sobota

15,30- 16,00 *Coffee break*

16,00 - 17,00 - Room Ibiscus

Session 2A - Virtual Reality

Chair: *Giovanni D'Errico*

[Developing of a Virtual Reality Serious Game for Emotional Recognition and Understanding: oVRlooked](#)

Henar Guillen-Sanz, Itziar Quevedo-Bayona, Kim Martinez

[How Stationary, Gaze-Directed, and Treadmill Locomotion Affect Relaxation in Immersive Virtual Nature](#)

Mika Amann, Daniel Hepperle, Matthias Wölfel

[Hot Potato! Using the Startle Response to Quantify the Effect of Mid-Air Haptics on the Salience of Virtual Reality Events](#)

Quinn Cabooter, Birgit Casselman, Jonas De Bruyne, Lieven De Marez, Klaas Bombeke

[Biophilic Design in Virtual Reality Learning Environments: Effects on Engagement, Perceived Restorativeness, Mental Workload, and Learning Outcomes](#)

Laura Cormio, Elisa Gambelli Fenili, Luigi Vella, Maura Mengoni

16,00 - 17,00 - Room Camelia

Session 2B - Track #7 Extended Reality, Artificial Intelligence, and Biosignals in Biomedical Applications

Chair: *Ersilia Vallefuoco*

[Canadian Virtual Reality Technology to Ease Psychological and Physical Symptoms in Individuals at End of Life: Usability and Safety in Hospital Palliative Care](#)

Alexander Moreno, Célia Rigoulat, Mégan Dubois, Capucine Pichon, Pénélope Pelletier, Céline Turk, Léa Stracuzzi, Carlota Caamano

[A Multimodal Behavioural, Eye-Tracking, and EEG Study Under Simulated Hemianopia in Virtual Reality](#)

Francesca Nonis, Elena Carlotta Olivetti, Enrico Vezzetti, Federica Marcolin, Alessia Celeghin

[Med-Mate - Vision of a Touch-Free, Context Adaptive, Extended Reality Assistant on Smart Glasses for Healthcare Professionals](#)

Michael Riesner, Lidia Roszko, Victor Victor, Julia Kleber, Karsten Wendt, Felix von Bechtolsheim, Julia Kleber

[Radio-Anatomical Interactive Library: A RAILway Into The Future Of Digital Education](#)

Damiano Coato, Gianmarco Dolino, Riccardo Forni, Arnar Evgení Gunnarsson, Halldór Jónsson Jr, Paolo Gargiulo

[EEG Microstate Dynamics During Immersive Virtual Reality in Parkinson's Disease](#)

Carmine Gelormini, Moriz Sterr, Lorena Guerrini, Federica Pescaglia, Ida Maruotto, Halldor Johnson Jr., Gylfi Örn Þormar, Hannes Petersen, Giorgio Di Lorenzo, Paolo Gargiulo

16,00 - 17,00 - Room Orchidea

Session 2C - Track #10 Digital Transformation and Advanced Technologies in Healthcare: From Complex Systems Modeling to XR-Driven Innovation

Chair: Vito Del Vecchio

[A Modular Software Framework for Sensor-Driven Respiratory Telerehabilitation and Remote Monitoring](#)

Alessia Bramanti, Pietro Cassieri, Elisa Anna Contursi, Giuseppe De Filippo, Simona De Santis, Gianluca Fimiani, Marina Garofano, Francesco Pio Matassino, Andrea Marino, Gianvito Mitrano, Gabriele Mongelli, Claudio Pascarelli, Colomba Pessolano, Simranjit Singh, Gianpiero Sisto, Giuseppe Scanniello

[Review on Design Methodologies for Ludic XR Experiences in the Health Sector](#)

Edoardo Polimeno, Giuliana Barba, Christian Catalano

[Visualizing the Invisible: A Virtual Reality Application for Exploring Airflow and Particle Distribution in Operating Rooms](#)

Haakon Trøstheim Flaarønning, Bård Venås, Trond Thorgeir Harsem

[VR-Based Training for Psychiatry Scholars: A Conceptual Architecture for Interviewing and Diagnosis](#)

Nicolò Gianmauro Totaro, Roberto Vadacca, Christian Catalano, Alessia Anna Catalano, Antonietta Curci

[Cardiovascular Risk Prediction Using Explainable AI to Enable Clinical Process Mining](#)

Lerina Aversano, Martina Iammarino, Debora Montano

8,15 - 9,30

Poster Session 1

Chairs: Maria Cristina Barba and Carola Gatto

Mapping Neural Activity During Object Assembly Tasks: A comparison between low- and high-frequency EEG oscillations activity

Benedetta Vignati, Flavia Ciminaghi, Angelica Daffinà, Michela Balconi

GameRAT: A Mixed Reality Application for Engaging and Configurable Rehabilitation

Juho Puurunen, Janset Shawash, Julia Hautanen, Santeri Saarinen

Augmented Reality Agents as a Framework for Studying Embodied AI through Information Mediation

Asia Koroleva, Ulysses Bernardet

Teaching human-centered design for XR-based rehabilitation: An experiential learning approach

Marta Mondellini, Sara Arlati

Memory and Parameter Efficient Adapters for 3D Surgical Scene Understanding

Stefano Mazzocchetti, Laura Cencenelli, Paolo Bernante, Emanuela Marcelli

Design and Development of a Multimodal Virtual Reality Protocol to Investigate Embodiment-Enhancing Techniques in Healthy Participants and Clinical Populations

Giorgia Malerba, Emilia Biffi, Chiara Barà, Roberta Nossa, Fabio Alexander Storm, Riccardo Riboni, Marco Sacco, Giovanna Rizzo, Alfonso Mastropietro, Sara Arlati

EmpathyPod: An Interactive XR System for Exploring Hearing Diversity

Andrea Gulli, Emanuele Zanon, Giovanni Nicoli, Cristian Leorin, Michele Geronazzo

Learning Through Spatial Interaction: An AR Multimodal Storyworld for Emotion Cognition Training with Autistic Children

Tian Zhao, Wen Zhou, Ni Ding

Mindfulness-based interventions mediated by virtual reality in caregivers of psychiatric patients: a pilot study

Morena De Francesco, Chiara Milasi, Marina Barberio, Alfredo Albertini, Nicola Tallarico, Piergiorgina Menniti, Cristiana Colacino, Vittoria Siciliano, Francesca Grillo, Cristina Segura Garcia, Antonio Cerasa

VRthritis Measurement Tool: Development of VR-Derived Candidate Biomarkers for Osteoarthritis Rehabilitation

Barbora Darmová, Samantha Lewis-Fung, Vanessa Geitz, Danielle Tchao, Lora Appel

Virtual Reality-based system for the rehabilitation of vestibular disorders

Alessandro Nardi, Edoardo Bonfanti, Sara Arlati, Marta Mondellini, Thomas Bowman, Marco Sacco

Virtual Reality-Guided Slow Breathing During Chemotherapy: A Pilot Electrodermal Activity Study

Vittorio Santoriello, Alfonso Maria Ponsiglione, Carmine Giugliano, Francesco Amato, Flavio Di Lisio, Cosimo Guerra, Dalila Esposito, Rosario De Feo, Maria Pia Bruno, Ornella Piazza, Marco Cascella

The Future of Medicine is Immersive: How XR and AI are Transforming Healthcare

Dana Tsoy, Yevgeniya Daineko

Vortex-R: A Mixed Reality Platform for Oculomotor, Vestibular, and Balance Rehabilitation on HoloLens 2

Paolo Meriggi, Mattia Randazzo, Valerio Gower, Davide Cattaneo, Johanna Jonsdottir, Edoardo Bonfanti, Thomas Bowman

Effects of Virtual Reality on Fetal Heart Rate During Labor: A Pilot Study with Symbolic Analysis

Michela Russo, Vittorio Santoriello, Luigi Gallo, Giuseppe De Pietro, Giuseppe Caggianese, Andrea Chirico, Antonio Giordano, Marco Cascella, Laura Sarno, Ersilia Vallefuoco, Carmen Bonaguro, Caterina Fulgione, Maurizio Guida, Francesco Amato, Alfonso Maria Ponsiglione, Maria Romano

Virtual or Tangible? Understanding the Role of Object Type on eXtended Reality Social Interaction for Stroke Rehabilitation

Sérgio Oliveira, Bernardo Marques, Pedro Reisinho, David Palricas, Samuel Silva, Carlos Ferreira, Paulo Dias, Beatriz Sousa Santos

Beyond the Wearable Barrier: Gymga-Studio and the Web-Native Paradigm for Touchless Augmented Virtuality in Digital Health

Riccardo Cangini, Filippo Costa

[Metaverse in Surgery: Our Experience](#)

Michele Ammendola, Francesca Vescio, Giuseppe Massimiliano De Luca, Maria Luposella, Nicola De Angelis, Alessandro Dario Mazzotta, Riccardo Memeo, Carmen Scalise, Ibrahim Al Souleman, Maher Moazin, Mansoor Khan, Andrew Gumbs, Mario Testini, Matthew Walsh, Silvia Curcio, Mohanad Al Ansari

[Using virtual reality simulation to assess the effects of waiting room design on stress and well-being: pre-pilot results](#)

Margherita Osimani, Selen Naz Saritas, Eleonora Bonifazi, Rachele Alessandra Marziali, Francesco Balducci, Valentina Tombolesi, Sara Arlati, Marta Mondellini, Marco Sacco, Daniele Spoladore, Lorena Rossi, Vera Stara

[Exploring Emotion-Aware Adaptation in VR through ML and Facial Action Units](#)

Francesca Nonis, Saba Sarlak, Enrico Vezzetti, Alessia Celeghin, Federica Marcolin

[Augmented-Reality Worker Assistance System for Control Cabinet Assembly](#)

Patrick Bründl, Neval Pervane, Jörg Franke

[Seeing the Data Clearly Perception of Font Size and Contrast in XR Industrial Dashboards](#)

Jozef Husár, Myroslav Omelianenko

[Immersive Visualisation of Bristle Fluid-Structure Interaction Dynamics](#)

Jinjiang Li, Carri King, Joshua Woodcock, Mostafa R.A. Nabawy, Lee Margetts

[An XR-Based Simulation Platform for Human-Automation Collaboration in Industrial Work Machines](#)

Fasih Munir Malik, Victor Zhidchenko, Heikki Handroos

[Meta-Working Trainer: An XR-Based Training System for Workers Teleoperating Robots](#)

Katashi Nagao, Kazuhiro Esaki

[Learning to Gain Resilience - A Modular XR Training Architecture Derived from Industry Use Cases](#)

Josef Wolfartsberger, Sabrina R. Sorko, Lena Leitenbauer, Christian Jandl, Thomas Holzmann

[Gesture-Driven Remote Robot Mission Activation through Smart Glasses: An XR Interaction Pipeline for Industrial Assistance](#)

Antonio Zanesco, Pietro Russo, Gianluigi Spinelli, Iñaki Martinez-Sarriegui, Pablo Aguirrezabal, Alberto del Rio

[Modular Approach <http://Incs168400243of> Virtualization for Digital Twin in Extended Reality in Concept of Industry 4.0](#)

Michal Šlauka, Martin Pajpach, Filip Švec, Tomáš Sedláček, Oto Haffner

[Standardization of service network architecture for five-dimensional interoperable Digital Twin in Industry 4.0](#)

Filip Švec, Martin Pajpach, Michal Šlauka, Erik Kučera, Rudolf Pribiš

[Beyond Vision: The Design of Multisensory XR Experiences](#)

Marina Ricci, Maria Di Summa

[Grounding Text-Generated Avatar Interaction: A Work-in-Progress Pipeline for Extended Reality](#)

Minh Hieu Tran, Thomas Lundqvist, Marcus Valtonen Örnå, Héctor Caltenco, Edison Pignaton de Freitas

[TwinEU: BIM-to-XR Asset Pipeline for Interactive Digital Twin Visualization](#)

Luca Greci, Ferdinando Bosco, Vincenzo Croce

[Towards a Digital Twin Enabled Cooperative Drone Network for Operations in GPS Denied Disaster Areas](#)

Giulio Avanzini, Margareth Eloisa Violetta Bottiglione, Angelo Corallo, Massimiliano Gervasi, Francesco Saccone, Corrado Aaron Visaggio, Alessandro Zavoli, Danilo Zona

[Crossing the Uncanny Valley: Effects of Avatar Realism on Student Trust and Engagement in Educational Virtual Humans](#)

Rafael da Silva Rosa, Ana Grasielle Dionísio Correa, Valéria Farinazzo Martins, Alexandre Gomes de Siqueira, Ismar Frango Silveira

[AI-based Facial Video Analysis for Real-Time Pain Detection in Oncology: A Feasibility Study with Novel Temporal Scores](#)

Flavio Di Liso, Mohammed Naveed Shariff, Vittorio Santoriello, Cosimo Guerra, Rosario De Feo, Ornella Piazza, Marco Cascella

[Augmented Reality-Driven Digital Documentation for PLC-Based Automation Systems](#)

Myroslav Omelianenko, Jozef Husár, Ján Pitel

[Toward a Digital Twin Aggregate in Healthcare centered on the Gut Microbiome](#)

Mariasimona Miglietta, Alessia Benevento, Massimiliano Gervasi, Giulia Pellegrino, Matteo Minelli, Angelo Corallo, Fabrizio Durant, Mauro Minelli

[Collaborative XR simulators with real-time affective adaptation for occupational risk prevention](#)

David Checa Cruz, Sandra Rodriguez Arribas, Ricardo Solano Gómez, Andres Bustillo Iglesias

[Integrating Interactive Storytelling and Cross Reality with LLM Support: A Pilot Study on Social Skills Training for Individuals with Autism Spectrum Disorder](#)

Pietro Ammaturo, Giulia Valcamonica, Francesco Vona, Franca Garzotto

9,30 - 10,30 **Keynote Speaker 2**

Sven Nömm - Tallinn University of Technology

Exploring Human Cognitive States Through Explainable AI: Lessons from Drawing Tests

10,30- 11,00 *Coffee break*

11,00 - 12,00 **Research Showcase**

Chair: Lucio Tommaso De Paolis

- YOUBIQUO, Italy
- Riga Technical University, Latvia
- Reykjavik University, Iceland
- European Association for eXtended Reality

12,00 - 13,00 **Panel 1**

AI in the Future of Healthcare

Moderator: Ersilia Vallefucio

- Claudio De Stefano, University of Cassino, Italy
- Francesco Fontanella, University of Cassino, Italy
- Giorgio De Nunzio, University of Salento, Italy
- Oscar Mayora, Fondazione Bruno Kessler, Italy

13,00 - 14,30 *Lunch*

14,30 - 15,30 - Room Ibiscus

Session 3A - Track #7 Extended Reality, Artificial Intelligence, and Biosignals in Biomedical Applications

Chair: Michela Russo

[Intraoperative AR and VR guidance for the reduction of complex articular fractures based on X-Ray imaging and 3D-2D registration](#)

Emanuele Marmeggi, Paolo Domenico Parchi, Vincenzo Ferrari

[Occlusion-Resilient Mixed Reality: A Smart Object Architecture for Upper Limb Rehabilitation](#)

Rafael Echevarría Aceña, Rubén Grande, Vanesa Herrera, Ana de los Reyes-Guzmán, Javier Albusac

[An XR-Based Training System for Foundational Hip-Hop Dance Movements with Automatic Evaluation](#) Kazuhiro

Esaki, Katashi Nagao

[Beyond Body Scans: Low-Parameter Avatars and Cardio-Visual Illusions for Embodiment in Virtual Reality Psychotherapy](#)

Johannes Günter Herforth, Fiammetta Zanetti, Karsten Schönbein, Annika P.C. Lutz, Jean Botev

14,30 - 15,30 - Room Camelia

Session 3B - AI, Virtual Humans and Digital Twins

Chair: Walter Terkaj

[Towards a Multi-Sensor Digital Twin Baseline of the Ta' Marija Sea Cave \(Malta\) for XR-Based Monitoring and Outreach](#)

Emanuele Colica, Paul Tickle, Sebastiano D'Amico, Luciano Galone, Stefano Furlani, Stefano Devoto, Alan Deidun, Adam Gauci, Aaron Micallef

[I have a drone!' Task-Based Interaction in Immersive and Non-Immersive Contexts](#)

Melinda Dooly

[Interactive Artificial Intelligence-Based System for Early Detection and Management of Social Crises in People with ASD \(video\)](#)

Rolando Marcelo Álvarez Veintimilla, Josue Bladimir Morales Llanganate, María Belén Taco Chuquitarco, María Gabriela Àvila Robalino

14,30 - 15,30 - Room Orchidea

Session 3C - XR in Medicine

Chair: Michele Sansone

[Gesture-Based Mixed Reality Registration for Intraoperative Surgical Navigation](#)

Eirik Gromholt Homlong, Ignas Kupcikevicius, Luca Boretto, Ole Jakob Elle, Rahul P.K. Menon

[Metrology for eXtended Reality: Intra- and Inter-Individual Variability in Gesture-Based Distance Measurements with Head-Mounted Displays](#)

Leopoldo Angrisani, Pasquale Arpaia, Egidio De Benedetto, Luigi Duraccio, Michele Sansone

[A Personalized sEMG Calibration Framework and Deep Learning Architecture for Amputee-Oriented XR Interaction](#)

Heejun Youn, Jaeseung Kim, Yeohnshik Choe, Yongwoo Kim, Sanghoon Lee, Jingeun Kwon, Changsik Pak, Joonpio Hong, Hyunsuk Suh, Soonchul Kwon

15,30- 16,00 *Coffee break*

16,00 - 17,00 - Room Ibiscus

Session 4A - Extended Reality

Chair: Sara Arlati

[VR-Sono: Eye-Hand Training for 6-DoF Ultrasound Plane Synthesis](#)

Armin Grasnack, Christian Erker, Sheikh R. R. Rivu, Ali M. Khan

[Dynamic Entity Data Visualization in Complex Spatial Environments Using Vertex Coloring: Unreal Engine Benchmark](#)

Kai Franke, Tobias Koch

[Mapping Tangible User Interfaces: A Systematic and Interactive Literature Review](#)

Noham Rodrigues, Anaëlle Hily, Alex Gabriel, Paul-Hubert Baudalet

[FastShaders: Performance-Aware Node-Based Shader Authoring for Web-Based Virtual Reality Content](#)

Alvis Misjuns, Arnis Cirulis

16,00 - 17,00 - Room Camelia

Session 4B - Extended Reality

Chair: Federica Faggiano

[Extended Reality in Education: Analysis of Benefits, Risks and Design Challenges](#)

Valerio De Luca, Ilaria Pino, Luigi Gallo

[Social Configuration as a Design Variable for Avatar-Mediated Interaction in Networked Multiplayer VR](#)

Iresh Jayasundara, Nirasha Kaluarachchi, Paula Alavesa

[Towards Better Beginnings: User Onboarding in Immersive Virtual Reality Applications](#)

Sam Sabah, Jan Schneider, Atezaz Ahmad, Andreas Dengel, Hendrik Drachsler

[Integrating Narrative and Ludic Design in Virtual Reality Exposure Therapy: An Exploratory Study on Fear of Flying](#)

Silvino Martins, Mário Vairinhos, Sandra Soares, Ana Félix, Carolina Araújo, Filipa Diniz

Integrated Facial Identification and Person Re-Identification Using Body Silhouette and Clothing Texture in Non-Overlapping Cameras ([video](#))

José Luis Carillo-Medilla, Ivone Arias-Almeida, Edwin Chasiquiza Molina, Patricio Espinel-Mena, Nancy Jacho Guanoluisa, Marco Flores Calero

Immersive Digital Twin for Industrial Control Education ([video](#))

Víctor H. Andaluz, Christian P. Carvajal, Javier Culqui-Tipan

Natural Hand Tracking Interaction for Complex Automotive Suspension Assembly in Virtual Reality ([video](#))

Fernando Pusda Cheza, Jimmy Gallegos Ayala, Hugo Salazar Escobar

Virtual Reality for Accessible Tourism ([video](#))

Fernando Caicedo-Altamirano, Magaly Guanoluisa-Padilla, Silvia Alpusig-Cuichan, Nancy Guerrón-Paredes, David Rivas-Lalaleo

Immersive Augmented Reality Training System for Conveyor Belt Maintenance on a Didactic Batch Manufacturing Platform that Emulates Industrial Environments ([video](#))

Walter Santamaría, Danny Toapanta, Edwin Pruna, Ivón Escobar, Adrián Villarroel

8,15 - 9,30

Poster Session 2

Chairs: Maria Cristina Barba and Carola Gatto

[A Taxonomic Framework for Artificial Intelligence-based Sustainable Innovation in Agri-Food Sector](#)

Marta Menegoli, Damiano Calò, Maria Elena Latino

[Toward Seamless Human-Robot Collaboration: VR-Enhanced Teleoperation with Transparent Shared Control](#)

Majd Karoui, Célestin Preault, Vincent Havard, David Baudry

[Spatial AI Interface for Energy Grid Management: Preliminary results of an XR-based application](#)

Jorge Oliveira, Tomaz Saraiva, Andrii Horlov, Costas Mylonas, George Fragiadakis, George Makridis

[Stabilizing the Localization of Physical Objects in Mixed Reality Scenes](#)

Kokou Abalo, Charles Gouin-Vallerand

[Polyspatial Urbanism: Toward an Ontology of Digital-Physical Urban Space in the Age of Spatial Computing](#)

Narmeen Marji

[Augmented Reality for Immersive Analytics in Manufacturing: Designing and Evaluating the ARINIA Prototype](#)

Tobias Reichenstein, Spyridon Georg Koustas, Simon Börnicke, Benjamin Gutwald, Martin Stefan Barth, Till Sindel, Jens Fürst, Jörg Franke, Patrick Bründl

[Designing Avatars in Virtual Rehabilitation: Preliminary clinical requirements for aesthetic and embodiment optimization](#)

Eleonora Diletta Sarcinella, Anna Forzato, Ilaria Vergine, Marta Pizzolante, Alice Chirico, Carlo Galimberti, Andrea Gaggioli

[A Qualitatively Informed Toolkit for Collaborative Rehabilitation and Telerehabilitation in Virtual Reality: Guidelines and a Checklist](#)

Ilaria Vergine, Marta Pizzolante, Eleonora Diletta Sarcinella, Sara Isernia, Edoardo Palumbo, Irene Giovanna Aprile, Antonio Cerasa, Francesca Baglio, Carlo Galimberti, Andrea Gaggioli

[Design of a Multi-Application System for a Human Digital Twin Centered Gut Microbiome Dysbiosis](#)

Antonio Caforio, Angelo Corallo, Giovanni D'Errico, Massimiliano Gervasi, Mariasimona Miglietta, Giulia Pellegrino, Marco Lucio Sarcinella, Mauro Minelli

[Registration of ship blocks and CAD models for AR-based work support using segmentation-based structural member extraction](#)

Soyoung Park, Kyungho Lee, Youngwook Nam

[Improving point cloud annotation efficiency using unsupervised over-segmentation](#)

Mikus Vancans, Bram Ton, Danny Plass

[Decal-Based Dynamic Vegetation Shadows for Standalone Virtual Reality](#)

Laura Ozoliņa, Arnis Cīrulis

[Low-Power Continuous Gaze Estimation for XR Smart Eyewear Using Photosensor Oculography and Lightweight Regression Models](#)

Flavia Nicotri, Carlo Pezzoli, Marco Brando Mario Paracchini, Luca Francesco Raduzzi, Daniele Bani, Giulio Marano; Luca Merigo, Marco Marcon

[Metrological Characterization and CAD-Agnostic Data Pipeline for Consumer-Grade XR Tracking in Functional Mechanical Design](#)

Luca Di Angelo, Paolo Di Stefano, Emanuele Guardiani, Antonio Marzola, Andrea Vasarelli

[Bringing Back True Data Form: A Comparative Study of Abstract and Non-Abstract Visualizations in Virtual Reality](#)

Youssef Elwy, Amal Yassien, Carsten Busch, Martin Steinicke, Nada Sharaf, Slim Abdennadher

[Extending Physical Boundaries: Development of a Social Robot Digital Twin as an Extended Reality Cybernetic Avatar \(XR-CA\)](#)

Dario Alfonso Cuello Mejia, Arne Hitzmann, Yukiko Horikawa, Miyashita Takahiro

[immerge: An AI-Powered XR Assistant for Sustainable Food Choices](#)

Katerina Tomovits, Sofia Pappa, Konstantinos Koukoudis, Vasileios Frantzis, Angelos Amditis, Tina Katika

[Pillar Labeling in 3D Room Structure Estimation via 2D Semantic Segmentation](#)

Marin Wada, Junya Morioka, Miho Adachi, Ryusuke Miyamoto

[Environmental Context and User Perception in VR Walking: A Pilot Stair-Like Stepping Study](#)

Katsuhiko Onishi, Masaki Sakamoto, Masanao Koeda, Morihiro Tsujishita Hiroshi Noborio

[WeaveXR: Bridging the XR Authoring Gap with Execution-Faithful In-Situ Development](#)

Nikolaos Giovanopoulos, Asterios Leonidis, Constantine Stephanidis

[An axiomatic design-based reference model for early-stage conception of immersive virtual environments](#)

Lucas Almeida, Tiago A.N. Silva, Márcio F. Catapan, Yasmim Thasla, Ingrid Winkler

[Towards Immersive Virtual Environments for Safety and Design Scenarios in Educational Buildings](#)

Alessandro Soliman, Paola Gasbarri, Agata Marta Soccini, Silvia Meschini, Lavinia Chiara Tagliabue, Marco Grangetto, Francesco Ferrise

[Extending the options for VR content creation in Davis](#)

Doron Goldfarb, Benno Kossatz, Lukas Riegler

[Design and prototyping of a multi-user VR cycling experience using smart trainers and 360° video](#)

Arnis Cirulis, Lauris Taube

[Reality Capture for Immersive XR: Integrating 3D Scanning into Extended Reality Environments](#)

Kennard Nicolai, Armin Muschallik, Julia Lückhof

[Proxemics. Exploring Personal Space, Digital Embodiment and Environmental Awareness through Interactive Mixed Reality Installation](#)

Marco Strobel, Christian Geiger

[Exploring Head-Mounted Augmented Reality Interfaces for Automotive Applications](#)

Reinhard Stockinger, Andreas Riegler

[Engineering Interfaces for Supervising Virtual Reality Sessions at Real Time](#)

Samuel Truman, Sebastian von Mammen

[Mindfulness Mediated by Virtual Reality or Audio Immersive Stimulations: a Multiple Session Intervention](#)

Chiara Milasi, Morena De Francesco, Marina Barberio, Piergiiovanna Menniti, Alfredo Albertini, Nicola Tallarico, Giovannigiacomo Cascas, Francesca Morica, Federico Rocca, Antonio Cerasa

[CAVEPAL: Bidirectional Integration of Conversational AI and Game Mechanics](#)

Michal Krezalek, Clare Martin, David Duce, Shelly Coe, Arantza Aldea, Inna Skarga-Bandurova

[Interactive Crime Scene Analysis in Virtual Reality: a Prototype for Spatially Linked Information and contextualized Navigation](#)

Emma Kunoth, Julian Stockemer, Klaus Böhm, Fabian Püschel

[Comparative Evaluation of User Experience in Asymmetric AR-VR Remote Collaboration Systems](#)

Honoka Tashiro, Yusei Yamanaka, Fumito Kitamura, Norio Setozaki

[Development of a Multiverse-Based Disaster Learning Environment for Experiencing Multiple Hazards](#)

Norio Setozaki, Honoka Tashiro, Keita Itsuwa, Fumito Kitamura

[Immersive Learning for Alpine Rescue through Neuroscience and eXtended Reality Technologies: the project ALPINE-XR](#)

Sara Arlati, Riccardo Giussani, Nicolò Dozio, Riccardo Parin, Ivana Juric, Pier Luigi Ingrassia, Simon Rauch, Roberta Petrino, Marta Mondellini, Laura Battistel, Alessandro Nardi, Marco Sacco, Francesco Ferrise

[Predicting User Performance in Virtual Reality Safety Training Using Machine Learning Techniques](#)

Alejandro Álvarez-Marín, Isabel Henríquez-Coroseo

[Operational Legitimacy in XR: Co-Creating XR Training with Mountain Rescuers](#)

Maëlan Poyer, Riccardo Parin

[Immersive Virtual Reality for Molecular Visualization: A Preliminary Study in Outreach Contexts](#)

António Costa, Hugo Filipe

[Vibe Coding as a Boundary Object in Interdisciplinary XR-Based AAC Development](#)

Edoardo Dalla Mutta, Aygün Varol, Tiina Vuohijoki, Tanja Vihriälä, Jaana Mäkinen, Vincenza Benigno, Johanna Virkki

[An Artificial Intelligence Mobile App for Financial transactions recognition and management](#)

Federico Vittorio Chiodo, Davide Tosi

[Photorealistic XR for Cultural Heritage Enabled by a Fog-Based Rendering Framework](#)

9,30 - 10,30 **Keynote Speakers 3 - Room**

Charlotte Triebus and Christian Geiger - *Duesseldorf University of Applied Sciences*
New Media Performing Arts - Creating full body experiences with XR, HCI and AI

10,30- 11,00 *Coffee break*

11,00 - 12,00 **Demo 3**

Chair: Sara Arlati

H-PORT: A VR-Based Digital Twin Simulator for Next-Generation Hydrogen Port Hubs Mava
XR Solution S.r.l. - *Mattia Pedroncelli*

12,00 - 13,00 **Panel 2**

Immersive Learning in the Age of AI

Moderator: Federica Faggiano

- *Andres Bustillo, University of Burgos, Spain*
- *Marcello Carrozzino, Sant'Anna School of Advanced Studies, Italy*
- *Raffaele Casciaro, University of Salento, Italy*

13,00 - 14,30 *Lunch*

14,30 - 15,30 - Room Ibiscus

Session 5A - Track #1 XR for Art, Design, and Entertainment

Chair: Christian Geiger

[eXplaural: Visual exploration of acoustics in XR](#)

Gabriel Arlauskas, Thomas Lüttich, Holger Reckter, Paulo Ferreira-Lopes, Willi Bücking, Jan Glück, Kristof Korwisi

[Fostering Player Autonomy in VR Emergent Narratives via Large Language Models](#)

Inês Santos, Mário Vairinhos, Joaquim Santos

[Mixed Reality for Intangible Cultural Heritage: Virtual Portals and Hybrid Guided Visits in a Prison Museum](#)

Anastasia Dominguez Burzio, Francesco Strada, Andrea Bottino

14,30 - 15,30 - Room Camelia

Session 5B - Track #4 New Trends in Learning and Training in the Virtual World

Chair: Andres Bustillo

[Towards Better Beginnings: User Onboarding in Immersive Virtual Reality Applications](#)

Sam Sabah, Jan Schneider, Atezaz Ahmad, Andreas Dengel, Hendrik Drachsler

[Visualization of the Martian Surface and Terraforming Processes in a VR Serious Game Using Multi-scale LOD Elevation Data](#)

Milosz Gnat, Robert Olszewski

[Effects of Gamified VR Lesson on Cognitive Load and User Experience in Conceptual Knowledge: A Pilot Study](#)

Vincent Reynaert, Tristan Pascart, Simon Walenczak, Benjamin De Witte

[A Multimodal Assessment Framework for Cognitive Ergonomics in Immersive Industrial Training \(video\)](#)

Sara Buonocore, Francesca Massa, Antimo Angelino, Carmine Di Leva, Salvatore Francesco Errico, Raffaele De Amicis, Giuseppe Di Gironimo

14,30 - 15,30 - Room Orchidea

Session 5C - Track #10 Digital Transformation and Advanced Technologies in Industry: From Complex Systems Modeling to XR-Driven Innovation

Chair: Vito Del Vecchio

[A Secure-by-Design IoT Micro-Proxy Architecture as a Foundational Layer for Context-Based Digital Twins: Evidence from Smart Water Networks](#)

Francesco Otello Buccoliero, Francesca Calabrese, Marco Cataldo, Vito Del Vecchio, Enza Giangreco, Mariangela Lazoi, Giampaolo Pascali, Nicolò Gianmauro Totaro

[Indoor Navigation Systems in Smart Hospitals: A Review from the Industry 4.0 Perspective](#)

Erisa Bekteshi, Angelo Corallo, Malvina Halilaj, Elektra Myrto, Claudio Pascarelli

[ATTILIO: Automated BIM Modelling and AR-Supported Inspection of Breakwater Structures with Artificial Blocks](#)

Angela Vantaggiato, Carla Di Biccari, Mattia Mangia, Emanuela Brai

[Immersive Digital Twin for Monitoring and Validation of an Automated Industrial Process \(video\)](#)

Jessica Ortiz, Lizeth Camuendo, José Ramón

15,30- 16,00 Coffee break

16,00 - 17,15 - Room Ibiscus

Session 6A - Track #1 XR for Art, Design, and Entertainment

Chair: Holger Reckter

[WebAR Spatial Journalism: Cross-Platform Architecture and Technical Innovations for Immersive Documentary Experiences](#)

Narmeen Marji, Janset Shawash, Wesa Aapro, Irina Kononova

[Generative AI as a Creative Co-Agent in XR: A Study on Immersive Human-AI Looped Workflows](#)

Nan Ma, Dongxing Yu

[A Virtual Museum with a Controlled Generative AI Guide: Designing and Evaluating an XR Educational Experience](#)

Adeline Patricia Buzori, Franco Tecchia, Chiara Evangelista, Marcello Carrozzino

[Sweating in Anticipation: Electrodermal Insights into Adaptive VR Horror Game Design](#)

Samuel Dossche, Jonas De Bruyne, Aleksandra Zheleva, Klaas Bombeke

[We, Brute Force: Perceptual Architecture and Choreographic Translation in 180° Stereoscopic VR](#)

Charlotte Triebus, Christian Geiger

16,00 - 17,15 - Room Camelia

Session 6B - Track #4 New Trends in Learning and Training in the Virtual World

Chair: Alejandro Álvarez-Marín, Andres Bustillo

[Teaching Product Assembly with VR: Advantages, Shortcomings, and Student Perceptions](#)

Marta Mondellini, Sara Arlati, Alessandro Stefanone, Elena Lucania, Giorgio Colombo, Marcello Urgo, Walter Terkaj

[Beyond Better Replies: How GPT Reshapes Dialogue and Immersive Experience in VR Learning](#)

Paolo Mengoni, Kristen Yuanxi Li, Daniel Jiandong Shen, Aru Nurgissayeva, Paulina Pui Yun Wong

[Immersive Virtual Reality Training for Machining Operations](#)

María del Puy Carretero Carrasco, Iñaki Mirena Arrieta, Bruno Simões, Pedro José Arrazola

[Augmented Reality-Based Remote Ship Maintenance Support System Considering Maritime Communication Constraints and MWP](#)

Youngwook Nam, Kyungho Lee, Soyoung Park

16,00 - 17,00 - Room Orchidea

Session 6C - Track #10 Digital Transformation and Advanced Technologies in Industry and Healthcare: From Complex Systems Modeling to XR-Driven Innovation

Chair: Massimiliano Gervasi

[Immersive Virtual Reality for Psychosocial Awareness and Prevention among Adolescents and young adults: Design and Preliminary Evaluation of Three Pilot Experiences on Gender Stereotypes, Gambling Risk, and Disability Inclusion](#)

Erica Santaguida, Giovanni Giuliodori, Eleonora Lanfranco, Matteo Caponi, Marcello Carrozzino, Massimo Bergamasco

[Digital Twin Frameworks for Critical Infrastructure Safety and Security: a Systematic Literature Review about BIM, GIS, and Asset Management Integration for DT](#)

Emanuela Brai, Carla Di Biccari, Angelo Corallo

[Ex-Novo Lab: a Conceptual Innovation Management Platform](#)

Vito Del Vecchio, Mariangela Lazoi, Fabio Paracchini, Giorgia Specchia

[Integrated remote sensing and decision support framework for automated monitoring in aquaponic systems](#)

Alessandro Sicuro, Marta Sozzo, Licinio Corbari, Alessandro Torrisi, Antonino Di Guardo, Paolo Bianchi, Lucia Cantone

17,15 - 18,00 - Room Ibisus

Session 7A - Track #10 Digital Transformation and Advanced Technologies in Industry: From Complex Systems Modeling to XR-Driven Innovation

Chair: Vito Del Vecchio

[Energy-Aware MLOps via Automated Knowledge Distillation: Early Findings and Implications for eXtended Reality](#)

Roberto Vergallo, Andrea Andrenucci, Andrea Elia, Luca Mainetti

[A Review of BIM/GIS Integration for Underwater, Coastal, and Cultural Heritage](#)

Mattia Mangia, Sharmila Gope, Claudio Pascarelli, Carla Di Biccari, Girolamo Fiorentino

[Architecture of 5D-I-HCDT Platform for Industry 4.0](#)

Martin Pajpach, Filip Švec, Michal Šlauka, Rudolf Pribiš, Peter Drahoš

[Augmented reality on mobile devices for teaching internal combustion engines \(video\)](#)

Jimmy Gallegos Ayala, Fernando Pusda Cheza, Emily Jaramillo Narvaez

17,15 - 18,00 - Room Camelia

Session 7B - Track #4 New Trends in Learning and Training in the Virtual World

Chair: Alejandro Álvarez-Marín

[Experience-based learning in VR for manufacturing workers - A case study on battery safety training in vocational education](#)

Henrik Söderlund, Nazmiyeh Sadiyeh, Marianne Garabetian, Daniel Năfors, Björn Johansson

[From Access to Adoption: Usability and Training Cultures in VR-Based Smoke-Diving Training Among Estonian Firefighters](#)

Jaanika Puusalu, Stella Polikarpus

[VR-Based Training Environment for Oil Drilling](#)

Mohamed Amine Souidi, Mohammed Itair, Imad Eddine Djekoune, Amel Ourahmoune, Said Azouaou, Mohamed Neffah, Rani Elmeouche

[Evaluation of an Automated Mesh Post-Processing Pipeline Using PyMeshLab: Implications for Cultural Heritage Digitization](#)

Rina Behadini

[Exploring Appropriate Passive Haptic Mixed Reality Experiences for Indigenous Digital Cultural Artefacts within Community Contexts](#)

Chi Liu, Rochus Hinkel

[VerdeVetro: Immersive Virtual Reality for the Digital Preservation of Glassmaking Heritage](#)

Greta Pucci, Franco Tecchia, Massimo Bergamasco, Marcello Carrozzino

[The Emotional Impact of 360° Video Reconstructions of Wildfires on the Natural Environment](#)

Victor Cuellas-de-Paz, Bruno Rodriguez-Garcia, Henar Guillen-Sanz

[Emotive Storyliving: A Tangible, Ritual-Based Virtual Reality Experience for Emotional Engagement with Cultural Heritage](#)

Sina Elyasi, Alessandro Pollini, Vlasios Kasapakis, Ioannis Chatzigiannakis

[Conversational Access to Cultural Heritage in VR: An Extractive QA Assistant Integrated into an Immersive Museum Experience](#)

Mariella Farella, Giuseppe Chiazese, Giosuè Lo Bosco

[Augmented Reality and gamification for Cultural Heritage and Balanced Tech Use](#)

Fiorella Custodero

[Designing Virtual Museums Through Self-Determination Theory: A Theoretical Framework for User Experience](#)

Ilaria Filonzi, Anna Logetskaia, Carlo Chiorri, Ilaria Torre, Andrea Chirico, Andrea Patti, Vladimiro Carlo Patatu

[Designing for Authenticity in Hybrid Multisensory Heritage Installations: A Comparative Study of Multiplayer and Single-Player Interaction](#)

Valentina Bertelli, Giuseppe Città, Marcello Massidda, Alessandra Marasco, Sofia Pescarin

[AI Agents for Evaluating Universal Design in XR Architectural and Heritage Environments](#)

Anders Hermund, Nina-Franziska Helmich Christiansen

[Designing XR Systems for Open-Air Museums: A Service-Oriented Approach](#)

Rosita Marchetti

[Context-Aware Visualization for Cultural Heritage: Challenges, Tools, and User Needs](#)

Irene Muci, Alessandra Chirivì, Andrea Pandurino, Alberto Bucciero

[Beyond the Wow Effect: Preliminary Research on User Expectations for Transparency in XR Cultural Heritage Experiences](#)

Federica Bonifazi, Ivana Cerato

[Architectural Advantages of Engine Migration in Digital Heritage: Overcoming Rendering Constraints in the Balzi Rossi VR Experience from Unreal Engine 5.3 to 5.7 Transition](#)

Matteo Scaramuzzino, Saverio Iacono, Gaia Lorenzoni, Daniele Zolezzi, Gianni Vercelli

[From Digital Models to Physical Restorations: FFF and CNC in Conservation Practice](#)

Daniela Rizzo, Daniela Fico, Raffaele Casciaro, Carola Esposito Corcione

[Artificial Intelligence unveil lost heritage](#)

Cecilia Maria Bolognesi, Andrea Giovanni Ferreri

[Designing an Immersive Serious Game for Learning Historical Cryptography: Simulating Enigma K](#)

Gaia Hernández Reixach, Joaquín García Andrés, Jose Manuel Aroca Fernández, David Checa Cruza

[Augmented Reality for Learning Piano Chords, Learning Outcome Assessment and Potential](#)

Erkki Koivisto, Paula Alavesä, Iresh Jayasundara, Elmeri Uotila

[Adoption of the VR Practice Labs in Higher Education: IITU Physics Study](#)

Umitkhan Turzhanov, Dana Tsoy, Madina Ipalakova, Yevgeniya Daineko, Regina Sharshova, Aigerim Shapiyeva

[Virtual Reality in Sport and Physical Education: Students' Attitudes and Implementation Challenges](#)

Milena Kuleva, Ivelina Kirilova, Stefka Djobova

[Virtual Reality for Ergonomic Assessment and Workspace Redesign in a Smart Learning Factory: A 3D Modeling and 360° Immersive Visualization Approach](#)

Aleksandar Trendov, Katerina Mitkovska Trendova, Tashko Rizov, Bojan Jovanoski

[Preliminary Effects of an Immersive Virtual Reality-Assisted Mini-Basketball Program on Motor Coordination in Elementary School Students](#)

Javier Sánchez-Guerrero, Julio A. Mocha-Bonilla, Gabriela Villalba-Garzon, Elizabeth Tayo-Haro

[Preliminary Effects of Immersive Virtual Reality Exergames on General Dynamic Coordination in Schoolchildren: A Single-Group Pretest-Posttest Study](#)

Javier Sánchez Guerrero, Dennis Hidalgo-Alava, Nelly Galora-Moya, Miryan Salazar-Tobar

[The ARIES Project: From Exploring AR Tools to Transforming Teaching and Learning in Secondary Schools](#)

Marco Arrigo, Mariella Farella, Gianluca Merlo, Linda Messineo, Davide Taibi

[Designing Inclusive Tangible-Digital Educational AR Puzzle Games](#)

Ilias Logothetis, Nikolas Vidakis

[When Poetry Meets Virtual Reality: A Case Study Experience for the Exploration of Giovan Battista Marino's Universe](#)

Ramona Quattrini, Dalma Frascarelli, Paolo Pieruccini, Floriana Boni

[Toward the Generalization of a Model Observer for CT Protocol Optimization by Means of Virtual Images](#)

Alessio Gnerucci, Sandra Doria, Jacopo Pratesi, Evaristo Cisbani, Luca Fedeli, Michele Ginolfi, Cesare Gori, Alessandro Marconi, Lorenzo Nicola Mazzoni, Marco Rossetti, Diego Sona, Adriana Taddeucci

[Real-Time Human Activity Monitoring for Feedback-Driven XR Training](#)

Samuele Dell'Oca, Elias Montini, Sara Masiero, Andrii Horlov, Tomaz Saraiva, Luís Oliveira

[LOOPER: A Framework for Synthetic Dataset Generation with Configurable Sensors and Multi-view XR Environments](#)

Paul Bréon, Imane Argui, Vincent Havard

[Development of a Personality-Annotated Avatar Database for User Experience Research in XR and the Metaverse](#)

Junji Ohyama

[Developing a Portable CAVE System for Community-Based Organizations](#)

Fatma Beji, Isabelle Dabat Pivotto, Vitor Matias, William de Paula Ferreira

[Augmented Intelligent Reality and Virtual Worlds \(AIR-VW\): An AI-Enabled XR Framework for Authentic Professional Learning in Virtual, Augmented and Mixed Reality](#)

Susanne Gregory

[Designing Humane AI as Ritual Technology: a Digital Triad Framework for Love and World-Disclosure in XR](#)

William Guschwan

[XR-Based Cognitive Training for Early-Onset Alzheimer Disease: Design of Interactive Virtual Reality Serious Games](#)

Ilaria Tramis, Francesca Perrone, Lucio Tommaso De Paolis, Valerio De Luca, Maria Cristina Barba

[Voice as a Biomarker for Obstructive Sleep Apnea: A Machine Learning-Based Screening Approach](#)

Carlo Robotti, Valerio Cesarini, Claudia Valenziano, Pietro Canzi, Eugenia Maiorano, Giulia Bertino, Marco Benazzo, Daniele Casali, Enrico Maria Carloni, Giovanni Costantini

[Structure-Based Discovery of Natural Product Inhibitors of Bacterial DNA Gyrase B with Antibacterial Potential](#)

Shwetha B Nagarajan, Anuradha Jayaraman, Sanjeevi Ramakrishnan

[Multimodal Conversational AI in Virtual Reality: A Comparative Study of Voice and Text Interaction in Sustainable Fashion Learning](#)

Diana S. Hernandez Manzo, Verda Munir, John Isaacs

[An Augmented Reality System for Nerve-Sparing Algorithms and Guided Surgical Trajectories](#)

Mattia Ciurlia, Giovanni D'Errico, Giulia Pellegrino, Maria Cristina Barba, Giovanna Ilenia Paladini, Lucio Tommaso De Paolis

[Design of a Virtual Human-Based Digital Reception System for Radiology Departments: a Requirement-Driven Approach](#)

Andrea De Dominicis, Giovanni D'Errico, Leonardo Matteo Dinoi, Chiara Pallara, Rocco Rizzo, Arnaldo Scardapane, Lucio Tommaso De Paolis

[Digital Curation Strategies for Archaeological Sites: A Review of Reviews](#)

Federica Faggiano, Carola Gatto, Bruno Rodríguez García, Lucio Tommaso De Paolis

[Amor Loci: Integrating a Conversational Virtual Human and Projection Mapping for Spatial Storytelling in Cultural Heritage](#)

Carola Gatto, Giovanni D'Errico, Laura Corchia, Giorgia De Giuseppe, Leonardo Matteo Dinoi, Federica Faggiano, Ileana Riera Panaro, Lucio Tommaso De Paolis

[Virtualized Digital Twin for Real-Time Industrial Process Supervision and Control Synchronization](#)

Jessica S. Ortiz, Jhony F. Guaita Rojano, Justin J. Taco Figueroa

[A Digital Twin Framework for Collaborative Robot Experimentation in an Industry 4.0 Educational Platform](#)

Gabriel Corrales, Kevin Benavides, Rachel Acosta, Jacqueline Llanos

[Optimizing Bicycle Assembly Training through Augmented Reality for Industry 4.0 Environments](#)

Alba Miranda, Jorge Ramírez-Jiménez, Paulina Ayala, Marcelo V. Garcia, Jose E. Naranjo

9,30 - 10,30 **Keynote Speaker 4**

Davide Borra - NoReal Interacwve, Italy

To bit or not to bit? The Virtual Presence is arrived

10,30- 11,00 *Coffee break*

11,00 - 12,00 **Panel 3**

Living Heritage through XR: Methods, Infrastructures and Experiences

Moderator: Carola Gatto

- Costanza Miliani, Institute of Heritage Science - National Research Council (CNR ISPC), Italy
- Alberto Bucciero, Institute of Heritage Science - National Research Council (CNR ISPC), Italy
- Sofia Pescarin, Institute of Heritage Science - National Research Council (CNR ISPC), Italy

12,00 - 13,00 **Research Showcase**

Chair: Lucio Tommaso De Paolis

- Polytechnic University of Marche, Italy
- AVR Lab, University of Salento, Italy
- COMMEDIA

13,00 - 14,30 *Lunch*

14,30 - 15,30 - Room Ibiscus

Session 8A - Track #3 Extended Reality for Archaeological Heritage: Integration, Validation, Reconstruction and Dissemination

Chair: Bruno Rodríguez García

[A Paper Prototyping Process for Teacher-Led Customization of an Augmented Reality Educational Game](#)

Robert Holford, Alison Bullock, Michaelah Wales, Steve Bednarski, T.C. Nicholas Graham

[From Cinematic Imagination to Virtual Experience: Exploring Fellini's Studio through Immersive Technologies within the GRAND TOUR AFAM Project](#)

Giulia Chellini, Venkata Srikanth Varma Datla, Saverio Giulio Malatesta, Rebecca Scarinci, Gabriella Trasciatti, Alba Bisante, Stefano Zeppieri, Emanuele Panizzi

[Immersive Virtual Experiences in Museums: User Experience and Exploration Patterns](#)

Bruno Rodriguez-Garcia, Jorge Castañ-Berniz, Julián Hoyos Alonso, Luis Araus-Ballesteros

[Multimodal Large Language Models and Computer Vision for Instruction Localization and Human Action Validation in Augmented Reality](#)

Xander Vanparys, Mikhail Fominykh, Eli De Poorter, Adnan Shahid, Fridolin Wild

14,30 - 15,30 - Room Camelia

Session 8B - Track #6 Virtual Restoration and Digital Twins for Cultural Heritage

Chair: Laura Corchia

[Artificial Intelligence for Virtual Reconstruction of Polychromy in Painted Baroque Sculpture of Southern Italy](#)

Letizia Maria Cerrati, Laura Corchia, Giorgia De Giuseppe, Mariachiara De Santis, Ileana Riera Panaro, Maura Lucia Sorrone, Lucio Tommaso De Paolis, Casciaro Raffaele

[Spatializing the Sonic Archive: A Digital Twin Framework for the Embodied Restoration of Sinrili' Musical Heritage](#)

Dea A. Widyaeavan, Andrea Bareggi, Kelvin Djunaidi

[Resurrecting the Golden Lyre of Ur: A Physics-Based Virtual Instrument Using Visual Haptic Surrogates for Hand-Tracked Interaction](#)

Yaozhong Zhang, Dahlia Shehata, Christof Weiß, Sebastian von Mammen

[Digital Twins and the Problem of Archaeological Inference](#)

Apostolos Vlachos

14,30 - 15,15 - Room Orchidea

Session 8C - AI-driven simulation in Cultural Heritage

Chair: Carola Gatto

[Between Memory and Simulation: Attitudes Toward AI Afterlife Agents](#)

Mirella Moser, Thomas Keller, Katja Fraedrich

[The Impact of an Artificial Intelligence-Based Product on Visitor Experience at a Cultural Heritage Site](#)

Virginija Jurėnienė, Aistė Varkulevičiūtė

[Digital Twin of Nea Paphos, Cyprus: Immersive 3D Visualization in a Game Engine](#)

Joanna Mazurek, Milosz Gnat

[Robust On-Device DICOM Parsing and Volumetric Rendering Tool for Apple Vision Pro \(visionOS\)](#) ***

Talha Iqbal, Aonghus Lawlor, Eric Wolsztynski, Ronan Killeen, Ihsan Ullah

15,30- 16,00 *Coffee break*

16,00 - 17,00 **Conference Closing**

Lucio Tommaso De Paolis - General Chair, XR Salento 2026, University of Salento, Italy

Pasquale Arpaia - General Chair, XR Salento 2026, University of Naples Federico II, Italy

Raffaele Casciaro - University of Salento, Italy