2026 10th International Conference on Intelligent Computing and Virtual & Augmented Reality Simulations (ICVARS 2026)

Chalon-sur-Saône, France
8-10 July 2026

IEEE Catalog Number: CFP260R1-POD
ISBN: 979-8-3315-4763-9

IEEE
Advancing Technology for Humanity

Copyright © 2026, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP260R1-POD
ISBN (Print-On-Demand):	979-8-3315-4763-9
ISBN (Online):	979-8-3315-4762-2

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com

CURRAN ASSOCIATES INC. proceedings .com

TABLE OF CONTENTS

Towards an Innovative User Experience Evaluation of Augmented Reality Applications: Validating the UXARclass Taxonomy based on an Experimental Study Approach 1
Stefan Graser, Martin Schrepp, Stephan Böhm

Towards the Blended Lifeworld Relation: A Postphenomenological Analysis of Mixed Reality Digital Twins 13
Andrew de Juan, Conor Lynch, Trevor Hogan

Authoring Co-Located Multi-user Augmented Reality Experiences for Exhibitions: A Review 22
Jessica L. Bitter, Ulrike Spierling

Garden or Gallery? Indoor and Outdoor Effects on Immersion, Narrative Transportation and Nature Engagement in Volumetric Augmented Reality Storytelling 34
Noura Kräuter, Ulrike Spierling

Perceptual Analysis of Visual Distortions in AR Image Composition 45
Mahzar Eisapour, Zhou Wang

UXARnalyze: Data Analysis Tool for an Innovative User Experience Evaluation Approach of Augmented Reality Applications 51
Stefan Graser, Martin Schrepp, Stephan Böhm

Intelligent Navigation and Product Discovery System for Inclusive Retail Environments 58
Pandithasundara N. B., Wijerathne C. G. T. N, Samishka H. T., Dilshan De Silva, Chamali Pabasara

Design and Preliminary Evaluation of a Portable Small-Scale Immersive Space 64
Nanami Hisamura, Tomokazu Ishikawa

Development and Evaluation of VR-based Therapy for Public Speaking Anxiety 70
Polsarut Supawatvorakhun, Shahrol Mohamaddan, Anusha Ashok, Muhammad Nur Adilin Mohd Anuardi Wan Noor Farah Wan Shamsuddin

Meta quest 3's hand-tracking accuracy for tracking the index fingertip during a movement is not spatially homogeneous 74
Guillaume Petit, Adam Toth, Antoine Dupuy, Lilian Motti

In-Context User Testing in Virtual Reality: Which Interaction Modality? 80
Laetitia Gros, Gildas Belay

Change Your Perspective - A VR Driving Simulator to Enhance Safety Awareness in Public Road Traffic 86
Salah Seidan, Justus Leichtweiß, Enes Yigitbas

Cybersickness in Immersive VR Simulation: Evaluating the Effects of Navigation, Interaction, and Environment 92
Dhruvi Hiteshbhai Choksi, Fatemeh Jamshidi

Driving Style Impact on Energy Consumption in Electric Buses with Virtual Reality Testing 102
Alessandra Manzo, Andrea Di Martino, Michela Longo

An AI-Driven Metaverse Learning Framework for Personalized Learning: A Learning Analytics Approach in Higher Education 107
Tran Doan Vinh, Tran Thi Huong, Bui Thi Thu Hoai, Nguyen Thi Viet, Nguyen Thi Duyen

Designing Sensory Metaphors in Virtual Reality for Understanding Building Acoustic 115
Audric Boullier, Fabrice Hennion, Pierre-Alain Lamand, Laurent Joblot, Ruding Lou

Comparative Evaluation of Immersive Virtual Reality and Document-Based Training for Industrial Gas Leak Response 127
Pranay Solanki, Anuraag Patil, Pramit Mazumdar, Pratik Shah

VR-RIAL: Virtual Reality for Rule-Infused Architectural Layouts 133
Vishnu Sridhar, Vikas Baliga, U Sanjeev, Srivishnu Muni Gade, Shylaja SS

Virtual Reality Based Earthquake Training with Blockchain Certification 139
Harsha Agrawal, Patchigolla Chinmayee, Samadhan Erande, Pratik Shah, Pramit Mazumdar

Evaluating the Viability of Smartphone Cameras for 3D Gaussian Splatting Operating Room Digital Twin Reconstruction 145
Rahmat Rizal Andhi, Guangyu Cao, Jan Gunnar Skogås, Liv-Inger Stenstad, Gabriel Hanssen Kiss

Reviewing digital twins coupled with generative AI to simplify human-computer interactions in complex environments 149
Nellou Michel, Vincent Perrot, Laurent Joblot, Jean-Rémy Chardonnet

Antidote Reconstitution in Exceptional Health Situation: a pilot study of the contribution of Mixed-Reality training 158
Lucas Morlet, Elodie Lopez

From Image to Experience: Rethinking Photography through Extended Reality with Reference to Mauritius 167
Chiranjiv Mahesh Kumar Aungnoo, Sanja Kovačević

Deep Learning-Based Scene Understanding for Adaptive UI Placement in Mobile Augmented Reality 176
Lokanatha Reddy Gandikota, Venkata Raghavendra Swamy, Sudheer Kumar Aluvala Gudipati Sateeshkumar Ponugoti, Satya Tulsi Ram Konda