

October, 08th, 2024 / Oral Session

8:30	Registration attendees (opening REAACH 24 connection)	
9:15	Greetings by Francesca Fatta (UID president) & Alessandro Luigini (IMG-network Association president) Welcome Greetings by REAACH organizers (R. Spallone, A. Giordano, M. Russo)	
Session 1 (chair: R. Spallone – A. Giordano)		
9:45	(Keynote 1) XR's challenges and solutions for cybersecurity	L. Ferro
10:15	Digital tools for the fruition of the monuments of the Nuragic civilization	<i>E. Cicalò, M. Valentino, A. Fusinetti, D. Simula, A. Sias</i>
10:30	A Virtual Reality dissemination experience of Sant'Agata chapel in Pisa: exploring lost murals and historical transformations	<i>P. Rechichi, I. Branca, G. Montalbano</i>
10:45	Urban Wunderkammer: physical and digital experiences in the historic center of Turin	<i>G. Bertola, F. Natta</i>
11:00	Txt2city. From the prompt to the city image	<i>S. Conte, M. Rossi</i>
11:15	Virtual Coffee Break	
Session 2 (chair: M. Russo & B. E. A. Piga)		
11:45	From digital representation to Virtual Reality: An Interactive Experience of Industrial Heritage	<i>P. Clini, R. Angeloni, M. D'Alessio, O. Mauro</i>
12:00	From theatre to museum. An online collection for the digital sharing of Lipari masks	<i>F. Fatta, F. Stilo</i>
12:15	The Sacred Space Dimension. Interactive Digital Narratives for the Scuola Grande di San Marco in Venice	<i>M. Ciammaichella, L. Di Benedetto, G. Liva</i>
12:30	Culture Heritage Re-exchange using extended reality (XR): Communicating the Italian Influence on Egyptian Architecture	<i>N. Mokhtar Ahmed</i>
12:45	Exploring rapid 3D heritage asset documentation: a comparative study of laser scanning and NeRF algorithms in museum construction	<i>F. Condorelli, G. Nicastro, A. Luigini</i>
13:00	Lunch Time	
Session 3 (chair: V. Cera & M. Russo)		
14:30	A semi-automated pipeline for HBIM integration: architectural 3D features recognition through AI implementation	<i>V. Andrea Cotella, M. Capone, G. Barile, P. Azzola, A. Cardaci</i>
14:45	A semantic classification approach for the Aachen Cathedral	<i>M. Attenni, R. Barni, C. Bianchini, M. Griffio</i>
15:00	Artificial Intelligence Alternatives for the Digitisation of Cultural Heritage, 3D Rendering Processes of the Sala degli Specchi in Villa Igea	<i>A. Basso, F. Condorelli, S. Morena, M. Perticarini</i>
15:15	Enhancing Photogrammetric Point Cloud Optimization with Deep Learning Clustering Models	<i>S. Emadi, B. Messina, M. Limongiello</i>
15:30	Advanced digitization of Cultural Heritage via NeRF	<i>M. Saccucci, A. Pelliccio</i>
15:45	Evaluation of the influence of survey data quality in supervised AI classification approaches for historical heritage	<i>G. Antuono, V. Cera, M. Campi, P. D'Agostino</i>

16:00	Virtual Coffee Break	
Session 4 (chair: A. Luigini & R. Spallone)		
16:30	Cultural Exchanges and Interactive Teaching: Mixed Reality Experiences in the ARTEST Project	<i>R. Garozzo, C. Santagati, O. Sukhbaatar</i>
16:45	GPT for Treatise Image Creation: a critical overview	<i>G. Flenghi, M. Russo, L. J. Senatore</i>
17:00	THE ARTIFICE AMONG LANGUAGES: automating geometric processes through AI	<i>M. Calvano, F. Camagni</i>
17:15	A reconstructed architecture as a meeting place and panoramic viewpoint	<i>C. C�ndito, I. Celoria, A. Meloni, A. Segalerba</i>
17:30	The VeNiss Project: the Digital Reconstruction of the Islands in the Venice Lagoon	<i>F. Panarotto</i>
17:45	Closing first day	

October, 09th, 2024 / Oral Session

8:30	Opening Member connection	
9:00	Meeting REAACH Association (only for REAACH 24 Members)	
Session 5 (chair: A. Giordano & C. Santagati)		
10:00	Inference control techniques in AI image generation for architectural design visualization	<i>E. Pupi, P. Rechichi</i>
10:15	Artificial Creativity. Rise and influence of generative AI in design	<i>G. Buratti</i>
10:30	Exploring Evolutionary Optimization: Integration of AI and Additive Manufacturing	<i>A. Cicala, M. Capone</i>
10:45	Artistry, technology and Challenges: the subtle balance between fake results and real integration in the use of AI for Image Generation on medieval frescos reconstructions	<i>G. Verdiani, F. Suppa, A. Charalambous</i>
11:00	Human-GenAI Integrated Process for the Virtual Reconstruction of a Lost Architecture	<i>L. Vespasiano, S. Brusaporci</i>
11:15	An Educational Experience between AI and Architectural Drawing	<i>G. Caffio, M. Unali, F. Zollo</i>
11:30	Virtual Coffee Break	
Session 6 (chair: M. Russo & A. Sdegno)		
12:00	Polyhedra. The Realm of Geometric Beauty by Adriano Graziotti: Augmented Reality experiences for a Phygital exhibition in the World of Catalan polyhedra	<i>M. Ceracchi</i>
12:15	Digital Reconstruction Models for the Enjoyment of Archaeological Heritage: The Case of the Santa Mustiola Site in Peccioli	<i>A. Calcagnini, E. Piludu, G. Frosini, D. Ulivieri, M.G. Bevilacqua</i>
12:30	"Campus Architettura PoliTO" project: WebAR for public engagement	<i>M. Vitali, R. Spallone, A. De Rossi, C. Deregibus, V. Palma, G. Bertola, E. Pupi, F. Ronco, M. Tempestini</i>

12:45	TIBER: Test, Interact and Build in Extended Realities	<i>R. Saleri, S. Mailleur, R. Fabro</i>
13:00	Evaluating Urban Environment and Perception with Varying Street View Perspectives	<i>Z. Cui, G. Stancato, B.E.A. Piga</i>
13:15	Artificial Intelligence and Extended Reality for Communicating the Uses of Natural Fibers in Building Construction: State of the Art and New Proposals	<i>R. Spallone, E. Pupi</i>
13:30	Lunch Time	
Session 7 (chair: A. Giordano & M. G. Bevilacqua)		
14:45	(Keynote 2) Revealing and Interpreting Complex Urban Patterns from Location Based Social Network Data. An investigation into Chinese stadiums in the Global South	<i>F. Carota & G. Amaral</i>
15:15	Evaluating Urban Perception: Using Machine Learning Predict through the Best Pipeline	<i>S. Lou, P. Ceravolo, G. Stancato, M. Boffi, N. Rainisio, B.E.A. Piga</i>
15:30	HBIM for predictive maintenance: the Galleria Borghese Museum case study	<i>F. Raco, M. Balzani, D. Rizzi, F. Planu, G. Galvani</i>
15:45	Phygital experiences in didactic activities: Museums and exhibit design explore extended reality	<i>E. C. Giovannini, F. Ronco, J. Bono</i>
16:00	Built Heritage Adapted Information Management through AI. The AIM-eBIM project	<i>F. Maietti, G. Giau, A. Zattini</i>
16:15	Virtual Coffee Break	
Session 8 (chair: F. Maietti & S. Brusaporci)		
16:45	Generation and Evaluation of High-Fidelity Virtual Twins: An All-Inclusive Pipeline for Enhanced Construction Efficiency in Diverse VR Environments	<i>B. E. Özel, F. Banfi, J. A. Bonini, M. Koray Pekerçli</i>
17:00	Automated Scan-to-BIM Methodology for Accurate 3D Modeling of Embedded MEP Systems	<i>L. Centarti, N.E. Güidi, B. Messina</i>
17:15	Advanced Deviation Analysis Visualization for BIM in Heritage Environment	<i>Y. Fasanella, P. Borin, R. Bernardello</i>
17:30	Scan-to-BIM-to-VR processes for the documentation and valorization of the defensive fortifications in Piombino	<i>M. Bigongiari, A. Lumini</i>
17:45	Semantic Integration of BIM Model with Existing Asset Databases and IoT data for Public Administrations	<i>C. Biagini, A. Bongini</i>
18:00	Closing remarks	

YouTube Session

A Review of Art-Tech Projects in the Context of Climate Change and Urban Evolution: Exploring Visualization Communication and Interactive Experiences	<i>J. Wang, L. Caneparo</i>
The Church of San Giorgio Maggiore in Venice: towards a Digital Fruition	<i>G. Piccinin, S. Mollica, A. Calandriello</i>
Virtual Venice: Exploring Miozzi's Floating Motorway Project Through 3D Models	<i>G. Casarano</i>
Holographic artefacts for the enhancement of academic heritage: the Curioni collection at the Politecnico di Torino	<i>M. M. Bocconcino, M. Pavignano, M. Vozzola</i>
The Representation of Digital Printed Illustrations and the Imagematching Visual Search: The Case of the Lyon16ci and 1516 Databases	<i>B. Tramelli</i>
XR in Serious Games. An Application on Palazzo Barberini	<i>S. Costantini, G. M. Fortuna, E. Guarino, A. Mazzei, A. Moretti, E. Pompeo, F. Stanziola</i>
AR and VR experiences for the fruition of Piffetti's library	<i>R. Spallone, M. Russo, C. Teolato, M. Vitali, V. Palma, E. Pupi</i>
Automated Recognition and Segmentation of Bricks Wall in Sicilian Monasteries	<i>M. Arena, G. Lax</i>
Unveiling hidden patterns: Clustering Mudejar church floor plans using Self-Organizing Maps for architectural analysis	<i>E. Delgado-Martos, G. Intra Sidola, C. Pesqueira Calvo, L. Carlevaris, A. M. Maitín, A. Nogales, G. Ramírez, A. J. García-Tejedor</i>
From temple to church: the evolution of San Lorenzo in Miranda through machine learning and BIM	<i>R. Barni, R. D'Alessandro, M. Griffo, M. Pistolesi, F. Porfiri</i>
AR for understanding architectural drawings: Gustavo Tognetti's plates	<i>R. Argiolas</i>
Digital Echoes - Revisiting the Venetian church of Crociferi from the perspective of artificial intelligence	<i>J. M. Barros Campos, F. Bergamo</i>
IgrejAR: an immersion in the lost 16th-century church of Madre de Deus	<i>L. Russo, J. Rafeiro, A. Tomé</i>
Synergies and Challenges: Integrating BIM and AI in Construction	<i>S. Balin, C. Bolognesi, P. Borin</i>
Integration of AI-based methodologies for surveying and virtual reconstruction: The case of the Chiostrò della Pace in the Monastery of Santi Giovanni e Paolo in Venice	<i>M. Perticarini, F. Albarelli, G. Lazzaretto, R. Tonin, A. Giordano, G. Guidarelli</i>
New Frontiers in Photography: Reality, AI and Reliability in Digital Age	<i>G. Robotti, M. Russo, G. Flenghi</i>
Learning about pastoral settlements through interactive videos	<i>L. Pizzonia</i>
Extended Reality for Edutainment in Museums	<i>M. Rinascimento</i>
Augmented Reality for Technical and Tourism Applications: an Efficient Methodology applied for the Milan Cathedral	<i>F. Fiorillo, C. Liu, F. Fassi</i>