

1ST September 2024 - 10:00 am – 6:00 pm (Italian Time, The Nicolaus Hotel, Bari, Italy)
VIPERC 3rd International Conference on Visual Pattern Extraction and Recognition for Cultural Heritage Understanding

9:00 am – 10:00 am Registration Desk

10:00 am – 10:15 am Welcome presentation
General Chairs: **Valentino Sangiorgio, Alessia Amelio**

10:15 am – 10:45 am Invited Speaker
Prof. Stefano Ferilli, University of Bari Aldo Moro, Italy
Talk: LPG-based Knowledge Graph Representation and Management for Cultural Heritage

10:45 am – 11:30 am (Session 1) 3D modelling and 3D printing
Session Chair: **Valentino Sangiorgio**

Time	Authors	Work
10:45-11:00	Alaa Ababneh	<i>Digital Solutions for Cultural Heritage: Preservation, Interpretation, and Engagement in line with the Venice Charter Principles</i>
11:00-11:15	Zahara Isania, Maria Pia Fanti and Giuseppe Casalino	<i>A Discrete Event Approach to the Simulation of Selective Laser Sintering 3D Printing Large Scale Production</i>
11:15-11:30	S. Anuj, W.S. Santheep, J. Alfred Daniel, R. Santosh and V Parthasarathy	<i>Virtual Resurrection Leveraging 3D Modeling for Digital Preservation of an Ancient Educational Institution</i>
Discussion panel		

11:30 am – 12:00 pm Coffee Break

12:00 pm – 1:30 pm (Session 2) Digitisation of diagnostics for historic constructions
Session Chair: **Cristina Cantagallo**

Time	Authors	Work
12:00-12:15	Vincenzo Mario Di Mucci, Angelo Cardellicchio, Sergio Ruggieri, Andrea Nettis, Vito Renò and Giuseppina Uva	<i>A new methodology to automatically detect cracks in existing RC bridges</i>
12:15-12:30	Luigi Salvatore Rainone, Vito Tateo, Siro Casolo and Giuseppina Uva	<i>Advanced non-linear 3D FEM modeling of masonry structures for the preservation of cultural heritage</i>
12:30-12:45	Sang-Yun Lee	<i>Measurement of Displacement of Petroglyphs of Bangudae Terrace in Daegok-ri, Ulju, using Edge and Region Extraction</i>
12:45-1:00	Domenica Costantino, Vincenzo Saverio Alfio and Massimiliano Pepe	<i>TLS survey for material analysis and G.I.S. classification of a marble pavement: the "Cappella di San Cataldo" in Taranto (Italy)</i>
Discussion panel		

1:30 pm – 2:30 pm Lunch

2:30 pm – 4:00 pm (Session 3) Machine learning and pattern recognition in cultural heritage

Session Chair: **Alessia Amelio**

Time	Authors	Work
2:30-2:45	Elisabetta Ferrara, Roberta Di Marco, Ilaria Filograsso, Alex Zappacosta, Valentina Gatta and Bruna Sinjari	<i>Integrating Coastal Cultural Heritage, Blue Economy, and One Health: A Holistic Framework for Sustainable Coastal Management</i>
2:45-3:00	Samantha Di Loreto, Alessandro Ricciutelli, Fabio Serpilli, Valter Lori and Sergio Montelpare	<i>Pattern recognition and neural networks for acoustic monitoring and conservation of the Historic Port of Ancona</i>
3:00-3:15	Gino Iannace, Giovanni Amadasi, Amelia Trematerra and Franz Policardi	<i>Acoustic applications of metamaterials</i>
3:15-3:30	Cristina Cantagallo, Giorgia Cianchino, Maria Giovanna Masciotta, Donato Palumbo, Massimiliano Pepe, Leonardo Cangelmi and Enrico Spacone	<i>Documentation and rapid assessment of the health status of historic centers by the use of 360-degree videos and G.I.S.</i>
Discussion panel		

4:00 pm – 4:30 pm Coffee Break

4:30 pm – 6:00 pm (Session 4) The digital transition in architectural engineering

Session Chairs: **Alessandro Ricciutelli** and **Samantha Di Loreto**

Time	Authors	Work
4:30 - 4:45	Francesco Fieni, Fabio Parisi and Nicola Parisi	<i>Parametric Algorithm-Driven Robotic Fabrication of Minimal Surfaces using Terrazzo Slabs from Marble Waste</i>
4:45 - 5:00	Federica Fiorio and Nicola Parisi	<i>IoT for cultural heritage: valorisation in the digital age</i>
5:00 - 5:15	Mariangela Lops and Nicola Parisi	<i>Building With Earth in Construction 4.0 Era: Earth Bee-Hive, Massive Masonries Using Space-Filling Polyhedra</i>
Discussion panel		

5:30 pm – 5:50 pm Award ceremony

Best Paper Award

Best Presentation Award

5:50 pm – 6:00 pm VIPERC 2024 closing