1.	Record Nr.	UNINA9910878054703321
	Autore	Gervasi Osvaldo
	Titolo	Computational Science and Its Applications – ICCSA 2024 Workshops : Hanoi, Vietnam, July 1–4, 2024, Proceedings, Part XI / / edited by Osvaldo Gervasi, Beniamino Murgante, Chiara Garau, David Taniar, Ana Maria A. C. Rocha, Maria Noelia Faginas Lago
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
	ISBN	9783031653438 3031653432
	Edizione	[1st ed. 2024.]
	Descrizione fisica	1 online resource (456 pages)
	Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 14825
	Altri autori (Persone)	MurganteBeniamino GarauChiara TaniarDavid C. RochaAna Maria A Faginas LagoMaria Noelia
	Disciplina	004.6
	Soggetti	Computer networks Computer science Computer engineering Artificial intelligence Computer systems Computer Communication Networks Computer Science Computer Engineering and Networks Artificial Intelligence Computer System Implementation
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Intro -- Preface -- Welcome Message from Organizers -- Organization -- Plenary Lectures -- Harnessing Artificial Intelligence for Enhanced Spatial Analysis of Natural Hazard Assessments -- Software Engineering Research in a New Situation -- Interpretability and Privacy Preservation in Large Language Models (LLMs) -- Contents - Part XI -- Urban Space Accessibility and Mobilities (USAM 2024) -- Criteria

to Identify Streets to Be Pedestrianised Near Major Commercial Attractors: The Case Study of the San Benedetto Market in Cagliari (Italy) -- 1 Introduction -- 2 State of Art on Pedestrianisation -- 3 Case Study and Selection of Applied Criteria -- 3.1 San Benedetto Market in Cagliari -- 4 Results -- 5 Discussion -- 6 Conclusions -- References -- Leveraging e-Surveys for Investigating Sustainable Urban Mobility: A Case Study in Small Community -- 1 Introduction -- 2 Methodology -- 3 Case Study -- 3.1 Survey's Layout -- 3.2 Survey's Validity Check and Error Correction -- 3.3 Data Analysis -- 4 Conclusions -- References -- Fostering Urban Soft Mobility by Means of Pedestrian Areas: Tentative Criteria for Evaluation of Impacts on Traffic -- 1 Introduction -- 2 Description of the Methodology -- 2.1 General Framework -- 2.2 Travel Demand Model -- 2.3 Combination of Basic Solutions to Find a More Complex Design Solution -- 2.4 Time-Saving Assessment -- 3 Case Study -- 3.1 Description of the Study Area and Critical Issues -- 3.2 Description of the Basic Design Solutions -- 4 Results -- 5 Conclusions -- References -- A GIS-Based Approach to Enhance Safety and Accessibility of Shared Mobility Services -- 1 Introduction -- 2 Methodological Approach -- 2.1 Accessibility Score -- 2.2 Safety Score -- 3 Case Study -- 3.1 Territorial Framework -- 3.2 Data on the Use of Bikesharing in Palermo -- 3.3 Accident Data -- 4 Results Ad Discussions.
4.1 Accessibility and Safety Evaluation -- 5 Conclusions -- References -- Best Practices in Integrated Demand-Responsive Transport Services for People and Freight -- 1 Introduction -- 2 Integration in the People-Freight Transport: Planning Levels and Their Implications -- 2.1 Planning Strategic, Tactical and Operational Planning: Some Definitions -- 2.2 Key Factors for Strategic Planning -- 2.3 Key Factors for Tactical Planning -- 2.4 Key Factors for Operational Planning -- 3 Evaluation of Key Readings for Future Logistics: Challenges, Strategies, and Perspectives -- 4 Conclusion -- References -- Evaluating Accessibility Within a Multimodal Transport Network: The Case Study of the City of Catania -- 1 Introduction -- 2 Methodological Framework -- 2.1 First Phase: Study Area and Transport Supply -- 2.2 Second Phase: Multimodal Transport Network Accessibility Indicators -- 3 Case Study -- 3.1 Territorial Framework and Current Transport Supply -- 3.2 Methodology Implementation to the Case Study -- 4 Results and Discussion -- 5 Conclusions -- References -- Virtual Reality and Augmented Reality and Applications (VRA 2024) -- TeTieuVR: An Immersive VR Application Introducing the Captivating Art of TeTieu Puppetry -- 1 Introduction -- 2 Background and Related Works -- 2.1 TeTieu Puppetry -- 2.2 Related Works -- 3 TeTieuVR -- 3.1 Overview of TeTieuVR -- 3.2 Database Building -- 4 Museum Design -- 5 Navigation and Interaction -- 5.1 Navigation -- 5.2 Interaction -- 5.3 Interactive Game -- 6 Experiment and Evaluation -- 7 Conclusion -- References -- Drawing and Geometrical Interpretation of Historical Constructive Elements for Conservation Activities: The Sixteenth Century Coffered Wooden Ceilings and the "camorcanna" Vaults of the Villa Cicogna Mozzoni.
1 From "casino di caccia" to "villa di delizia": Historical Notes About the Transformation Along the Centuries of Villa Cicogna Mozzoni in Bisuschio (Varese, Italy) -- 2 3D Survey and Geometric Modeling of the Villa for the Analysis and Interpretation of the Transformations -- 3 Geometries and Construction Techniques of Coffered, Lacunar Wooden Floors -- 4 Geometries and Construction Techniques of Lightweight Frescoed "camorcanna" Vaults -- 5 Conclusion: The Interpretation of 2D and 3D Geometrical Model to Understand the State of the Structures and to Plan Conservation Activities -- References --

Exploring the Metaverse: Opportunities for Tourism and Territorial Development -- 1 Introduction -- 2 Related Works -- 3 The Proposed Strategy from Implementing Metaverses -- 3.1 Highlights of the Development of the Virtual World -- 3.2 Description of the Preliminary Experience -- 3.3 Usability Questionnaire -- 4 Conclusions -- References -- Testing Anchors, User Experience and Usability Among 4 Game Elements in a Kindy Immersive Augmented Reality Game -- 1 Introduction -- 1.1 Problems -- 1.2 Objectives -- 1.3 Hypotheses -- 1.4 Research Questions -- 1.5 Significance -- 2 Related Work -- 2.1 Cognitive Development Stages -- 2.2 Metaverse, Technology Acceptance, Self-efficacy, Self-directed Learning -- 2.3 Open-Ended Challenges/Surprise -- 2.4 Augmented Reality (AR) -- 2.5 Human-Computer Interaction (HCI) -- 3 Methodology -- 3.1 Software Development Life Cycle -- 3.2 Participants -- 3.3 System Concept -- 3.4 Methods, Tools and Technologies -- 3.5 System Evaluation -- 4 Results -- 4.1 User Acceptance Testing Results -- 5 Discussion -- 6 Conclusion -- References -- Assessment Contribution of an Architectural Indoor Healthy Status via Biosensors Particles Spatial Simulation -- 1 Introduction -- 2 Objectives and Innovation -- 2.1 Objectives of the Research Proposal.
2.2 Innovation of the Research Proposal -- 3 Low-Cost Sensors for Human Health -- 4 Comfort and Air Quality Studies - Discussions -- 5 Research Methodology -- 5.1 Introduction -- 5.2 Sensors Implementation and Comfort Conditions Measurements -- 5.3 Simulation System and Techniques -- 5.4 3D Building Geometry Modelling Process -- 5.5 Air Quality Values 3D Representation -- 5.6 Advantages/Limitations of Simulation and Modelling Processes -- 6 Conclusions -- References -- PhD Showcase Papers -- Bayesian Geostatistics Modeling of Maritime Surveillance Data -- 1 Introduction -- 2 Geostatistics for Binary Data -- 2.1 Geostatistical Model -- 2.2 Hierarchical Models -- 2.3 Geostatistical Model for Binary Data -- 2.4 INLA and SPDE Approaches for Bayesian Estimation and Prediction -- 3 Modelling Maritime Fisheries Surveillance Data -- 3.1 Data -- 3.2 Spatial Model for Maritime Presumed Fisheries Infractions -- 3.3 Spatio-Temporal Model for Maritime Presumed Infractions -- 4 Discussion -- References -- Evaluation of Reinforcement Learning Algorithms Applied to an Autonomous Car Model for Educational Purposes -- 1 Introduction -- 2 Methodology -- 2.1 Agent-Based Modelling -- 2.2 Reinforcement Learning -- 2.3 Markov Decision Process -- 2.4 Bellman Equation -- 2.5 Optimal Policy -- 2.6 Q-learning Algorithm -- 3 Implementation of Reinforcement Learning in Autonomous Car Model -- 3.1 Components of the Autonomous Car Model -- 3.2 Implementation of the Q-learning Algorithm on the Car Model -- 4 Preliminary Results and Discussions -- 5 Conclusions -- References -- Short Papers -- Post-disaster Analysis Using GIS and a Composite Index to Assess the Vulnerability of Human Settlements: Earthquake of Al Haouz, Morocco -- 1 Introduction -- 2 Study Site and Data -- 2.1 Study Site -- 3 Data -- 4 Methodology and Results.
4.1 Visualization of the Post-disaster Using MAXAR Satellite Imagery -- 5 Vulnerability Study Using the Composite Index -- 5.1 Index Calculation Method -- 5.2 Results and Mapping of the Vulnerability Index -- 5.3 Overlaying the Epicenter Map on the Resilience Map to Target Restructuring Actions -- 6 Conclusion -- References -- GARMENTO - A Modular Virtual Clothes Try-On System for Fashion Manufacturers -- 1 Introduction -- 2 System Design -- 3 Implementation and Results -- 3.1 Try-On Module -- 3.2 MLOps and Microservice Implementation -- 3.3 Result and Analysis -- 4

Conclusion and Future Works -- References -- Solving Maximum Cut Problem with Multi-objective Enhance Quantum Approximate Optimization Algorithm -- 1 Introduction -- 2 Preliminary -- 2.1 Quantum Approximate Optimization Algorithm -- 2.2 The Maximum Cut Problem -- 3 Multiobjective Optimization for QAOA -- 4 Numerical Simulation -- 5 Conclusion and Future Work -- References -- Seismic Resilience Study for a Prioritization Plan in a High Seismic Hazard Area -- 1 Introduction -- 2 Methodology -- 3 Case Study Description -- 4 Seismic Damage Scenario -- 5 Quantification of Resilience and Prioritization -- 6 Conclusions -- References -- On the Dynamics of a Family of 2D Finite Cellular Automata -- 1 Introduction -- 2 A Family of Two-Dimensional Finite Cellular Automata -- 3 On the Dynamics for This Family of Cellular Automata -- 4 Final Remarks -- References -- Theoretical Insights on the S(1D) + H2O Reaction and Implications on the Chemistry at the Surface of Ice in Extraterrestrial Environments -- 1 Introduction -- 2 Theoretical Methods -- 3 Results and Discussion -- 3.1 Isolated System -- 3.2 Cluster of Four Water Molecules -- 4 Conclusion -- References -- Will the Metaverse Be a New Working Platform for Real Estate Investors and Professionals? -- 1 Introduction.
1.1 The Research Scope and Contribution.

Sommario/riassunto

This eleven-volume set LNCS 14815 – 14825 constitutes the refereed workshop proceedings of the 24th International Conference on Computational Science and Its Applications, ICCSA 2024, held at Hanoi, Vietnam, during July 1–4, 2024. The 281 full papers, 17 short papers and 2 PHD showcase papers included in this volume were carefully reviewed and selected from a total of 450 submissions. In addition, the conference consisted of 55 workshops, focusing on very topical issues of importance to science, technology and society: from new mathematical approaches for solving complex computational systems, to information and knowledge in the Internet of Things, new statistical and optimization methods, several Artificial Intelligence approaches, sustainability issues, smart cities and related technologies.