

1. Record Nr.	UNINA9910878062303321
Autore	Gervasi Osvaldo
Titolo	Computational Science and Its Applications – ICCSA 2024 Workshops : Hanoi, Vietnam, July 1–4, 2024, Proceedings, Part V // 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	9783031652820 3031652827
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (487 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 14819
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 V -- Evaluating Inner Areas Potentials (EIAP 2024) -- Understanding

Geographies of Architectural Heritage Abandonment in Inner Areas: A Multi-dimensional Investigation -- 1 Introduction -- 2 Causes and Effects of Abandonment Processes on Architectural Heritage: A Theoretical Reading -- 3 A Multi-dimensional Evaluation of Abandonment Processes in Inner Areas: Evidence from the NSIA Pilot Areas -- 4 Discussion and Final Reflections -- References -- The Enhancement of the Alta Valsesia Territorial Potential: A Collaboration-Based Approach Between Academia and Local Actors -- 1 Introduction -- 2 The B4R Methodological Approach for the Alta Valsesia Context -- 3 Study Area -- 4 Results -- 4.1 The Exploratory Analysis Main Results -- 4.2 The Co-design Activities and Results -- 4.3 The Co-visioning Process First Results -- 5 Conclusion -- References -- From Data Collection to a Cross-Cutting Analysis Visualisation: Territorial Complexity Overview to Foster Responsible Tourism in Rural Areas -- 1 Introduction -- 2 Background -- 3 Methodological Approach -- 4 Results: The Data Collection Process for Visualising and Interpreting the Territorial Complexity in SYSTOUR Project -- 4.1 The Thematic Map List -- 4.2 Shared Dataset and GGPP Assessment -- 4.3 Territorial Complexity Overview -- 5 Conclusion, Discussion and Limits -- References -- Resistance to Sardinia's Guarded Capacity: Multicriterial Mapping for Strategies and Valorization of Abandoned Places -- 1 Introduction -- 1.1 Territorial Reconnections -- 1.2 Contents and Aims. 2 Materials -- 2.1 The Uncontaminated Territory of Sardinia -- 2.2 Selecting the Case Study -- 3 Methods -- 3.1 Information-Units and Information-Bearers: Denotation and Connotation -- 3.2 Denotative Attributes: Official Sources of Data and Indices -- 3.3 Connotative Attribute: Informative Aggregate System and Hierarchical Evaluation -- 3.4 Joint Capacity/Resistance Index -- 4 Applications and Results -- 4.1 Evaluation Synthesis -- 4.2 Design Synthesis -- 5 Discussions and Conclusion -- References -- Intermunicipal Co-operation in Marginal Territories for the Rebalancing of Territorial Gaps. The Sicani Area in Sicily (Italy) -- 1 The Background -- 1.1 Territorial Inequalities -- 1.2 The B4R Research Project -- 2 Methodology -- 2.1 The B4R Methodology -- 2.2 The Co-visioning Phase -- 3 The Co-visioning Phase in the Sicani Focus Area -- 3.1 The Sicani Focus Area -- 3.2 A Fragmented Governance -- 3.3 The Co-visioning Method Applied in the Sicani Focus Area -- 3.4 Collaboration as the Connective Tissue of the Territory -- 4 Discussion -- References -- Exploring Mobility in Rural Areas. A Case Study in the Marche Region's Central Apennine -- 1 Introduction -- 2 Literature Exploration -- 3 Methodological Approach -- 4 Research Findings -- 5 Discussion and Conclusion -- 5.1 Mobility Pattern and Challenges -- 5.2 Implications for Rural Mobility Policies -- 5.3 Limitations and Future Recommendations -- References -- Ethical AI Applications for a Human-Centered Cyber Society (EthicAI 2024) -- Aspects of Digital Transformation of Higher Education in the Republic of Kazakhstan -- 1 Introduction -- 2 Digital Transformation of Higher Education in the Republic of Kazakhstan -- 3 The Ethical Side of Digital Transformation of Higher Education -- 4 Conclusion -- References -- Ethical Principles in Artificial Intelligence for Children: A Protocol for a Scoping Review. 1 Introduction -- 1.1 Ethics of Artificial Intelligence -- 1.2 Limits and Resources of Gray Literature -- 1.3 Scoping Review as a Literature Synthesis Methodology -- 2 Methodology -- 2.1 Eligibility Criteria -- 2.2 Information Sources and Search Strategy -- 2.3 Data Management and Selection Process -- 2.4 Data Items -- 2.5 Synthesis of Results -- 2.6 Risk of Biases -- 3 Discussion -- References -- Ethical Aspects

of Analyzing Kazakh Political Discourse -- 1 Introduction -- 2 Related Works -- 3 Research Methods -- 4 Ethical Aspects of Analyzing Kazakh Political Discourse -- 5 Conclusion -- References -- 4th International Workshop on Future Information System Technologies and Applications (FiSTA 2024) -- Can One Model Fit All? An Exploration of Wav2Lip's Lip-Syncing Generalizability Across Culturally Distinct Languages -- 1 Introduction -- 2 Related Works -- 3 Methodology -- 3.1 Wav2Lip Overview -- 3.2 Data Collection -- 3.3 Video Generation -- 3.4 Evaluation -- 3.5 Face-to-Face Translation Workflow -- 4 Experiments and Results -- 4.1 Quantitative Evaluation -- 4.2 Qualitative Evaluation -- 5 Discussion -- 6 Conclusion and Future Works -- References -- Internet of Things Implemented with Mruby -- 1 Introduction -- 2 Literature Review -- 2.1 Internet of Things -- 2.2 Microcontroller -- 2.3 Software Integration with Mruby -- 2.4 Long Range Communication -- 3 Methodology -- 3.1 Implementing the ESP32 Microcontroller with Mruby -- 3.2 Overview of Systems -- 3.3 Smart Farm System Design -- 4 Experiments and Results -- 4.1 Application -- 5 Conclusion -- References -- Geomatics for Resource Monitoring and Management (GRMM 2024) -- Estimating Urban Growth from Landsat 8 Data Using Post-classification and Albedo Change Analysis in GEE Environment -- 1 Introduction -- 2 Materials and Methods -- 2.1 Study Area -- 2.2 GEE Platform and Input Data. 2.3 Image Classification and Post-classification Comparison -- 2.4 Image Differencing and Isolated Pixel Filter -- 2.5 Albedo Estimation -- 2.6 Accuracy Assessment of the Urban Change Map -- 3 Results and Discussion -- 3.1 LU/LC Classification Maps and Accuracy Assessment -- 3.2 Change Detection -- 4 Conclusion -- References -- Exploiting Medium-Resolution Sentinel Data in Google Earth Engine for Burned Area Reflectance Classification -- 1 Introduction -- 2 Material and Methods -- 2.1 Study Area and Input Data -- 2.2 Preprocessing Analysis -- 2.3 Severity Metrics -- 2.4 Validation -- 2.5 GEE Code -- 3 Results and Discussion -- 4 Conclusion -- References -- Advancing Sustainable Water Management in Southern Italy Through Integrated Hydrological Modeling and Earth Observation -- 1 Introduction -- 2 Research Context -- 3 Pilot Case Study -- 4 SMAR Features and Use in the Literature -- 4.1 Description of the Model -- 4.2 Review of Applications -- 5 Conclusion and Research Directions -- References -- Silting Effect on Tidal Basin Circulation: A Case Study -- 1 Introduction -- 2 Study Area and Methodology -- 2.1 The Case Study: Bacino Fede -- 2.2 Numerical Model -- 3 Results and Discussion -- 3.1 Hydrodynamic Simulations -- 3.2 Water Quality Simulations -- 4 Conclusions -- References -- Using the Intensity Values Obtained from Terrestrial Laser Scanner for Monitoring the Effects of Plant Disease: The Case Study of Gorgognolo (Italy) -- 1 Introduction -- 2 The Study Area -- 3 Methodology Employed -- 4 Data Acquisition and Processing -- 5 Intensity Parameter Analysis -- 6 Conclusions, Remarks and Further Developments -- References -- The Influence of Sea Level and Wave Storms on Beach Erosion Along Apulian Coastline -- 1 Introduction -- 2 Materials and Methods -- 2.1 Case Study -- 2.2 Data Sources and Methods -- 3 Results -- 4 Discussion -- 5 Conclusions. References -- Optimize the Estimation of Maize Height Using Sentinel-1: A Case Study in Umbria, Italy -- 1 Introduction -- 2 Materials and Methods -- 2.1 Study Area and Field Data -- 2.2 Sentinel-1 Data -- 2.3 Random Forest Modeling and Statistical Analysis -- 3 Results and Discussion -- 3.1 SAR Parameters and Their Relationship with Maize Height -- 3.2 Random Forest Models -- 4 Conclusions -- References -- Optimizing Feature Selection for Solar Park Classification:

Approaches with OBIA and Machine Learning -- 1 Introduction -- 2 Study Area -- 3 Data Set -- 3.1 S2 Imagery -- 3.2 Methodology -- 3.3 SNIC Algorithm Segmentation -- 3.4 Features Extraction -- 3.5 Objects Labeling -- 3.6 RFE -- 3.7 Oversampling Data -- 3.8 RF Classification Models -- 3.9 Accuracy Analysis -- 4 Results -- 4.1 Segmentation -- 4.2 Object Labeling -- 4.3 RFE Results -- 4.4 RF Model Validation -- 4.5 Test Area Classification -- 5 Discussion and Conclusion -- References -- GIS, Remote Sensing, and Forecasting Systems for Precision Agriculture Development -- 1 Introduction -- 2 Materials and Methods -- 3 Case Study -- 4 Results -- 5 Discussion -- 6 Conclusion -- References -- Geographical Analysis, Urban Modeling, Spatial Statistics (Geog-And Mod 2024) -- Emergency Communication Protocols for Pleasure Boats Using Eye-Tracker and EEG -- 1 Introduction -- 2 Literature Review -- 3 Materials and Methods -- 3.1 Communication Protocol ISIDE -- 3.2 Technological Devices and Software -- 3.3 Scenario -- 3.4 Questionnaire -- 3.5 Experimental Design -- 3.6 Participants -- 3.7 KPIs -- 4 Result and Discussion -- 4.1 Test Performance -- 4.2 Cognitive and Vital Parameters -- 4.3 Eye-Gaze Movement -- 4.4 Questionnaire -- 4.5 Limitations -- 5 Conclusions -- Appendix 1 -- Appendix 2 -- References. Spatial Multi-criteria Analysis for the Planning of Green Hydrogen Infrastructure: The Case Study of the Industrial Area of Viggiano.

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.
