

# Contents

## **Ontology Evolution, Engineering, and Frameworks**

An Orchestration Framework for Linguistic Task Ontologies . . . . .	3
<i>Catherine Chavula and C. Maria Keet</i>	
On the Preservation of Evolving Digital Content – The Continuum Approach and Relevant Metadata Models. . . . .	15
<i>Nikolaos Lagos, Simon Waddington, and Jean-Yves Vion-Dury</i>	
Challenges for Ontological Engineering in the Humanities – A Case Study of Philosophy . . . . .	27
<i>Pawel Garbacz</i>	
Threshold Determination and Engaging Materials Scientists in Ontology Design. . . . .	39
<i>Jane Greenberg, Yue Zhang, Adrian Ogletree, Garritt J. Tucker, and Daniel Foley</i>	
What are Information Security Ontologies Useful for? . . . . .	51
<i>Miguel-Angel Sicilia, Elena García-Barriocanal, Javier Bermejo-Higuera, and Salvador Sánchez-Alonso</i>	

## **Semantic Web and Metadata Extraction, Modelling, Interoperability and Exploratory Search**

Interoperable Multimedia Annotation and Retrieval for the Tourism Sector. . .	65
<i>Antonios Chatzitoulousis, Pavlos S. Efraimidis, and Ioannis N. Athanasiadis</i>	
Species Identification Through Preference-Enriched Faceted Search. . . . .	77
<i>Yannis Tzitzikas, Nicolas Bailly, Panagiotis Papadakos, Nikos Minadakis, and George Nikitakis</i>	
An Expert System for Water Quality Monitoring Based on Ontology . . . . .	89
<i>Edmond Jajaga, Lule Ahmedi, and Figene Ahmedi</i>	
Discovering the Topical Evolution of the Digital Library Evaluation Community . . . . .	101
<i>Leonidas Papachristopoulos, Nikos Kleidis, Michalis Sfakakis, Giannis Tsakonas, and Christos Papatheodorou</i>	

Application of Metadata Standards for Interoperability Between Species Distribution Models. . . . .	113
<i>Cleverton Borba and Pedro Luiz Pizzigatti Correa</i>	

**Data Analysis, Reuse and Visualization**

Majority Voting Re-ranking Algorithm for Content Based-Image Retrieval. . .	121
<i>Mawloud Mosbah and Bachir Boucheham</i>	
Narrative Analysis for HyperGraph Ontology of Movies Using Plot Units . . .	132
<i>Sandeep Reddy Biddala and Navjyoti Singh</i>	

**Track on Digital Libraries, Information Retrieval, Linked and Social Data  
Models, Frameworks and Applications**

RDA Element Sets and RDA Value Vocabularies: Vocabularies for Resource Description in the Semantic Web . . . . .	147
<i>Fabício Silva Assumpção, José Eduardo Santarem Segundo, and Plácida Leopoldina Ventura Amorim da Costa Santos</i>	
Metadata for Scientific Audiovisual Media: Current Practices and Perspectives of the TIB AV-Portal. . . . .	159
<i>Sven Strobel and Paloma Marin-Arraiza</i>	
Metadata Interoperability and Ingestion of Learning Resources into a Modern LMS . . . . .	171
<i>Aikaterini K. Kalou, Dimitrios A. Koutsomitropoulos, Georgia D. Solomou, and Sotirios D. Botsios</i>	
Clustering Learning Objects for Improving Their Recommendation via Collaborative Filtering Algorithms. . . . .	183
<i>Henrique Lemos dos Santos, Cristian Cechinel, Ricardo Matsumura Araujo, and Miguel-Ángel Sicilia</i>	
Conceptualization of Personalized Privacy Preserving Algorithms . . . . .	195
<i>Buket Usenmez and Ozgu Can</i>	

**Data Quality and Evaluation Studies**

Evaluation of Metadata in Research Data Repositories: The Case of the DC. Subject Element . . . . .	203
<i>Dimitris Rousidis, Emmanouel Garoufallou, Panos Balatsoukas, and Miguel-Angel Sicilia</i>	

Software Applications Ecosystem for Authority Control. . . . .	214
<i>Leandro Tabares Martín, Félix Oscar Fernández Peña, Amed Abel Leiva Mederos, Marc Goovaerts, Dailiën Calzadilla Reyes, and Wilbert Alberto Ruano Álvarez</i>	
Digital Libraries Evaluation: Measuring Europeana's Usability . . . . .	225
<i>Anxhela Dani, Chrysanthi Chatzopoulou, Rania Siatiri, Fotis Mystakopoulos, Stavroula Antonopoulou, Evangelia Katrinaki, and Emmanouel Garoufallou</i>	
Usability Testing of an Annotation Tool in a Cultural Heritage Context. . . . .	237
<i>Karoline Hoff and Michael Preminger</i>	
An Exploration of Users' Needs for Multilingual Information Retrieval and Access. . . . .	249
<i>Evgenia Vassilakaki, Emmanouel Garoufallou, Frances Johnson, and R.J. Hartley</i>	
<b>Track on Metadata and Semantics for Open Repositories, Research Information Systems and Data Infrastructure</b>	
Mapping Large Scale Research Metadata to Linked Data: A Performance Comparison of HBase, CSV and XML . . . . .	261
<i>Sahar Vahdati, Farah Karim, Jyun-Yao Huang, and Christoph Lange</i>	
Contextual and Provenance Metadata in the Oxford University Research Archive (ORA). . . . .	274
<i>Tanya Gray Jones, Lucie Burgess, Neil Jefferies, Anusha Ranganathan, and Sally Rumsey</i>	
Labman: A Research Information System to Foster Insight Discovery Through Visualizations . . . . .	286
<i>Oscar Peña, Unai Aguilera, Aitor Almeida, and Diego López-de-Ipiña</i>	
Repositories for Open Science: The SciRepo Reference Model . . . . .	298
<i>Massimiliano Assante, Leonardo Candela, Donatella Castelli, Paolo Manghi, and Pasquale Pagano</i>	
On-Demand Integration and Linking of Open Data Information . . . . .	312
<i>Nuno Lopes, Martin Stephenson, Vanessa Lopez, Pierpaolo Tommasi, and Pól Mac Aonghusa</i>	
On Bridging Data Centers and Publishers: The Data-Literature Interlinking Service . . . . .	324
<i>Adrian Burton, Hylke Koers, Paolo Manghi, Sandro La Bruzzo, Amir Aryani, Michael Diepenbroek, and Uwe Schindler</i>	

Historical Records and Digitization Factors in Biodiversity Communities of Practice . . . . .	336
<i>Michael Khoo and Gary Rosenberg</i>	
Ontologies for Research Data Description: A Design Process Applied to Vehicle Simulation . . . . .	348
<i>João Aguiar Castro, Deborah Perrotta, Ricardo Carvalho Amorim, João Rocha da Silva, and Cristina Ribeiro</i>	
<b>Track on Metadata and Semantics for Agriculture, Food and Environment</b>	
Setting up a Global Linked Data Catalog of Datasets for Agriculture. . . . .	357
<i>Valeria Pesce, Ajit Maru, Phil Archer, Thembani Malapela, and Johannes Keizer</i>	
Improving Access to Big Data in Agriculture and Forestry Using Semantic Technologies . . . . .	369
<i>Rob Lokers, Yke van Randen, Rob Knapen, Stephan Gaubitzer, Sergey Zudin, and Sander Janssen</i>	
A Semantic Mediator for Handling Heterogeneity of Spatio-Temporal Environment Data . . . . .	381
<i>Ba-Huy Tran, Christine Plumejeaud-Perreau, Alain Bouju, and Vincent Bretagnolle</i>	
Ontology Evolution for Experimental Data in Food . . . . .	393
<i>Rim Touhami, Patrice Buche, Juliette Dibie, and Liliana Ibanescu</i>	
Graph Patterns as Representation of Rules Extracted from Decision Trees for Coffee Rust Detection . . . . .	405
<i>Emmanuel Lasso, Thiago Toshiyuki Thamada, Carlos Alberto Alves Meira, and Juan Carlos Corrales</i>	
<b>Track on Metadata and Semantics for Cultural Collections and Applications</b>	
Aggregating Cultural Heritage Data for Research Use: The Humanities Networked Infrastructure (HuNI). . . . .	417
<i>Deb Verhoeven and Toby Burrows</i>	
Historical Context Ontology (HiCO): A Conceptual Model for Describing Context Information of Cultural Heritage Objects . . . . .	424
<i>Marilena Daquino and Francesca Tomasi</i>	

## Track on European and National Projects

Standardizing NDT& E Techniques and Conservation Metadata for Cultural Artifacts . . . . .	439
<i>Dimitris Kouis, Evgenia Vassilakaki, Eftichia Vraimaki, Eleni Cheilakou, Amani Christiana Saint, Evangelos Sakkopoulos, Emmanouil Viennas, Erion-Vasilis Pikoulis, Nikolaos Nodarakis, Nick Achilleopoulos, Spiros Zervos, Giorgos Giannakopoulos, Daphne Kyriaki-Manessi, Athanasios Tsakalidis, and Maria Koui</i>	

## Poster Papers

ALIADA, an Open Source Tool for Automatic Publication of Linked Data from Libraries and Museums . . . . .	453
<i>Cristina Gareta</i>	
Resource Classification as the Basis for a Visualization Pipeline in LOD Scenarios . . . . .	457
<i>Oscar Peña, Unai Aguilera, and Diego López-de-Ipiña</i>	
<b>Author Index</b> . . . . .	461

Metadata and Semantics Research

9th Research Conference, MTSR 2015, Manchester, UK,

September 9-11, 2015, Proceedings

Garoufallou, E.; Hartley, R.J.; Gaitanou, P. (Eds.)

2015, XIX, 462 p. 143 illus. in color., Softcover

ISBN: 978-3-319-24128-9