# Contents

**Ontology Evolution, Engineering, and Frameworks**

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

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

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interoperable Multimedia Annotation and Retrieval for the Tourism Sector</td>
<td>65</td>
</tr>
<tr>
<td>Antonios Chatzitoulousis, Pavlos S. Efraimidis, and Ioannis N. Athanasiadis</td>
<td></td>
</tr>
<tr>
<td>Species Identification Through Preference-Enriched Faceted Search</td>
<td>77</td>
</tr>
<tr>
<td>Yannis Tzitzikas, Nicolas Bailly, Panagiotis Papadakos, Nikos Minadakis, and George Nikitakis</td>
<td></td>
</tr>
<tr>
<td>An Expert System for Water Quality Monitoring Based on Ontology</td>
<td>89</td>
</tr>
<tr>
<td>Edmond Jajaga, Lule Ahmed, and Figene Ahmedi</td>
<td></td>
</tr>
<tr>
<td>Discovering the Topical Evolution of the Digital Library Evaluation</td>
<td>101</td>
</tr>
<tr>
<td>Community</td>
<td></td>
</tr>
<tr>
<td>Leonidas Papachristopoulos, Nikos Kleidis, Michalis Sfakakis, Giannis Tsakonas, and Christos Papatheodorou</td>
<td></td>
</tr>
</tbody>
</table>
Application of Metadata Standards for Interoperability Between Species Distribution Models. .......................................................... 113
   Cleverton Borba and Pedro Luiz Pizzigatti Correa

Data Analysis, Reuse and Visualization

Majority Voting Re-ranking Algorithm for Content Based-Image Retrieval. . . 121
   Mawloud Mosbah and Bachir Boucheham

Narrative Analysis for HyperGraph Ontology of Movies Using Plot Units . . 132
   Sandeep Reddy Biddala and Navjyoti Singh

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
   Fabricio Silva Assumpção, José Eduardo Santarem Segundo,
   and Plácida Leopoldina Ventura Amorim da Costa Santos

Metadata for Scientific Audiovisual Media: Current Practices and Perspectives of the TIB|AV-Portal. .......................... 159
   Sven Strobel and Paloma Marín-Arraiza

Metadata Interoperability and Ingestion of Learning Resources into a Modern LMS .................................................. 171
   Aikaterini K. Kalou, Dimitrios A. Koutsomitropoulos,
   Georgia D. Solomou, and Sotirios D. Botsios

Clustering Learning Objects for Improving Their Recommendation via Collaborative Filtering Algorithms. ......................... 183
   Henrique Lemos dos Santos, Cristian Cechinel,
   Ricardo Matsumura Araujo, and Miguel-Ángel Sicilia

Conceptualization of Personalized Privacy Preserving Algorithms .. 195
   Buket Usenmez and Ozgu Can

Data Quality and Evaluation Studies

Evaluation of Metadata in Research Data Repositories: The Case of the DC.
   Subject Element ........................................................................ 203
   Dimitris Rousidis, Emmanouel Garoufallou, Panos Balatsoukas,
   and Miguel-Ángel Sicilia
Software Applications Ecosystem for Authority Control. .......................... 214
Leandro Tabares Martín, Félix Oscar Fernández Peña, Amed Abel Leiva Mederos, Marc Goovaerts, Dailién Calzadilla Reyes, and Wilbert Alberto Ruano Álvarez

Digital Libraries Evaluation: Measuring Europeana’s Usability ................. 225
Anxhela Dani, Chrysanthi Chatzopoulou, Rania Siatri, Fotis Mystakopoulos, Stavroula Antonopoulou, Evangelia Katrinaki, and Emmanouel Garoufallou

Usability Testing of an Annotation Tool in a Cultural Heritage Context. ..... 237
Karoline Hoff and Michael Preminger

An Exploration of Users’ Needs for Multilingual Information Retrieval and Access. ......................................................................................... 249
Evgenia Vassilakaki, Emmanouel Garoufallou, Frances Johnson, and R.J. Hartley

Track on Metadata and Semantics for Open Repositories, Research Information Systems and Data Infrastructure

Mapping Large Scale Research Metadata to Linked Data: A Performance Comparison of HBase, CSV and XML ..................................................... 261
Sahar Vahdati, Farah Karim, Jyun-Yao Huang, and Christoph Lange

Contextual and Provenance Metadata in the Oxford University Research Archive (ORA). ..................................................................................... 274
Tanya Gray Jones, Lucie Burgess, Neil Jefferies, Anusha Ranganathan, and Sally Rumsey

Labman: A Research Information System to Foster Insight Discovery Through Visualizations ................................................................. 286
Oscar Peña, Unai Aguilera, Aitor Almeida, and Diego López-de-Ipiña

Repositories for Open Science: The Sci Repo Reference Model .............. 298
Massimiliano Assante, Leonardo Candela, Donatella Castelli, Paolo Manghi, and Pasquale Pagano

On-Demand Integration and Linking of Open Data Information ............ 312
Nuno Lopes, Martin Stephenson, Vanessa Lopez, Pierpaolo Tommasi, and Pól Mac Aonghusa

On Bridging Data Centers and Publishers: The Data-Literature Interlinking Service ................................................................. 324
Adrian Burton, Hylke Koers, Paolo Manghi, Sandro La Bruzzo, Amir Aryani, Michael Diepenbroek, and Uwe Schindler
Historical Records and Digitization Factors in Biodiversity Communities
of Practice ................................................................. 336

Michael Khoo and Gary Rosenberg

Ontologies for Research Data Description: A Design Process Applied
to Vehicle Simulation ................................................... 348

João Aguiar Castro, Deborah Perrotta, Ricardo Carvalho Amorim,
João Rocha da Silva, and Cristina Ribeiro

Track on Metadata and Semantics for Agriculture, Food and Environment

Setting up a Global Linked Data Catalog of Datasets for Agriculture .......... 357

Valeria Pesce, Ajit Maru, Phil Archer, Thembani Malapela,
and Johannes Keizer

Improving Access to Big Data in Agriculture and Forestry Using Semantic Technologies ...................................................... 369

Rob Lokers, Yke van Randen, Rob Knepen, Stephan Gaubitzer,
Sergey Zudin, and Sander Janssen

A Semantic Mediator for Handling Heterogeneity of Spatio-Temporal Environment Data ...................................................... 381

Ba-Huy Tran, Christine Plumejeaud-Perreau, Alain Bouju,
and Vincent Bretagnolle

Ontology Evolution for Experimental Data in Food ................................. 393

Rim Touhami, Patrice Buche, Juliette Dibie, and Liliana Ibanescu

Graph Patterns as Representation of Rules Extracted from Decision Trees for Coffee Rust Detection .............................................. 405

Emmanuel Lasso, Thiago Toshiyuki Thamada,
Carlos Alberto Alves Meira, and Juan Carlos Corrales

Track on Metadata and Semantics for Cultural Collections and Applications

Aggregating Cultural Heritage Data for Research Use: The Humanities
Networked Infrastructure (HuNI) .............................................. 417

Deb Verhoeven and Toby Burrows

Historical Context Ontology (HiCO): A Conceptual Model for Describing
Context Information of Cultural Heritage Objects ................................ 424

Marilena Daquino and Francesca Tomasi
Track on European and National Projects

Standardizing NDT& E Techniques and Conservation Metadata for Cultural Artifacts

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

Poster Papers

ALIADA, an Open Source Tool for Automatic Publication of Linked Data from Libraries and Museums

Cristina Gareta

Resource Classification as the Basis for a Visualization Pipeline in LOD Scenarios

Oscar Peña, Unai Aguilera, and Diego López-de-Ipiña

Author Index
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