

MSW 2011

Proceedings of the 2nd International Workshop on the Multilingual Semantic Web

Collocated with the 10th International Semantic Web Conference
(ISWC 2011)



Bonn, Germany, October 23, 2011.

Sponsored by:



Endorsed by:



ACL SIGSEM

Preface

Multilingualism has become an issue of major interest for the Semantic Web community, in light of the substantial growth of internet users that create and update knowledge all over the world in languages other than English. This process has been accelerated due to initiatives such as the Linked Data initiative, which encourages not only governments and public institutes to make their data available to the public, but also private organizations in domains as far apart as medicine, cartography or music. These actors publish their data sources in the languages they are available in, and, as such, in order to make this information available to an international community, multilingual knowledge representation, access and translation are an impending need.

This second edition of the MSW workshop focused on the representation of multilingual information in the Semantic Web and Linked Data, specifically addressing issues in the cross-lingual discovery of mappings between multilingual Linked Data vocabularies and data sets, and the cross-lingual querying of knowledge repositories. The workshop brought together researchers from several distinct communities, including natural language processing, computational linguistics, human-computer interaction, artificial intelligence and the Semantic Web.

There were 13 submissions to the workshop, from which the program committee accepted 5 as full papers and 5 as short papers. Taking into account only the full papers the selection rate amounts to 40%. The accepted papers cover a variety of topics regarding the representation of lexical objects in the Semantic Web, the creation and management of multilingual knowledge bases, as well as the cross-lingual linking of multilingual ontologies and data sets. The MSW Workshop program also included a keynote talk by Sebastian Hellmann.

We would like to thank the authors for providing the content of the program. We would like to express our gratitude to the program committee for their work on reviewing papers and providing interesting feedback to authors. We would also like to thank Behrang Qasemizadeh for his technical support. And finally, we kindly acknowledge the European Union for its support through the research grant for Monnet (FP7-248458), the Spanish Ministry of Science and Innovation for its support through the BabelData project (TIN2010-17550), and the Science Foundation Ireland through Lion2 (SFI/08/CE/I1380). Special thanks also go to the European Project FlareNet (ECP-2007-LANG-617001) and the Special Interest Group on Computational Semantics (SIGSEM) of the Association for Computational Linguistics (ACL) for their endorsement.

Elena Montiel-Ponsoda
John McCrae
Paul Buitelaar
Philipp Cimiano

October, 2011

Table of Contents

<i>Cross-Lingual Web API Classification and Annotation</i>	1
Maria Maleshkova, Lukas Zilka, Petr Knoth and Carlos Pedrinaci	
<i>OntoVerbal-M: a Multilingual Verbaliser for SNOMED CT</i>	13
Fennie Liang, Robert Stevens and Alan Rector	
<i>Representing Translations on the Semantic Web</i>	25
Elena Montiel-Ponsoda, Jorge Gracia, Guadalupe Aguado-De-Cea and Asunción Gómez-Pérez	
<i>A Semantic Model for Integrated Content Management, Localisation and Language Technology Processing</i>	38
Dominic Jones, Alexander O’connor, Yalemisew M. Abgaz and David Lewis	
<i>An Expert System on Linguistics to Support Natural Multilingual Collaborative Management of Interlingual Semantic Web Knowledge bases</i>	50
Maxime Lefrançois and Fabien Gandon	
<i>Direct and Indirect Linking of Lexical Objects for Evolving Lexical Linked Data</i>	62
Yoshihiko Hayashi	
<i>Linking Domain-Specific Knowledge to Encyclopedic Knowledge: an Initial Approach to Linked Data</i>	68
Pilar León Araúz, Pamela Faber and Pedro J. Magaña Redondo	
<i>Squeezing LEMON with GATE</i>	74
Brian Davis, Fadi Badra, Paul Buitelaar, Siegfried Handschuh and Tobias Wunner	
<i>Accessing and Creating Multilingual Data on the Web for the Semantic Annotation of Cultural Heritage Texts</i>	80
Karlheinz Moerth, Thierry Declerck, Piroska Lendvai and Tamás Váradi	
<i>XSLT Conversion between XLIFF and RDF</i>	86
Dimitra Anastasiou	

MSW 2011 Organization

Organizing Committee

Elena Montiel-Ponsoda

Ontology Engineering Group (OEG), Departamento de Inteligencia Artificial
Universidad Politécnica de Madrid, España
<http://www.oeg-upm.net/index.php/en/phd/52-emontiel>

John McCrae

Semantic Computing Group, CITEC – University of Bielefeld
<http://www.sc.cit-ec.uni-bielefeld.de/people/jmccrae>

Paul Buitelaar

Unit for Natural Language Processing, DERI - National University of Ireland, Galway
<http://www.paulbuitelaar.net/>

Philipp Cimiano

Semantic Computing Group, Cognitive Interaction Technology Excellence Cluster (CITEC)
Bielefeld University, Germany
<http://www.cimiano.de>

Program Committee

Guadalupe Aguado de Cea, OEG, Universidad Politécnica de Madrid, Spain

Dimitra Anastasiou, Language & Literary Studies, University of Bremen, Germany

Nathalie Aussenac-Gilles, IRIT, Knowledge Engineering, Cognition and Cooperation, France

Roberto Basili, Università Tor Vergata, Rome - Artificial Intelligence group, Italy

Victor de Boer, Web & Media group - Vrije Universiteit, the Netherlands

Kalina Boncheva, Natural Language Processing Group, University of Sheffield, UK

Francis Bond, NICT - Language Infrastructure Group, Japan

Christopher Brewster, Aston University - Operations and Information Management Group, UK

Nicoletta Calzolari, ILC-CNR - Computational Linguistics Institute, Italy

Jeremy Carroll, TopQuadrant, USA

Key-Sun Choi, KAIST - Semantic Web Research Center, South-Korea

Thierry Declerck, DFKI - Language Technology Lab, Germany

Aldo Gangemi, ISTC-CNR - Semantic Technology Laboratory, Italy

Asuncion Gómez Pérez, OEG, Universidad Politécnica de Madrid, Spain

Gregory Grefenstette, Exalead, France

Siegfried Handschuh, DERI, Nat. Univ. of Ireland, Galway, Ireland

Michael Hausenblas, DERI, Nat. Univ. of Ireland, Galway, Ireland

Sebastian Hellmann, Department of Business Information Systems - University of Leipzig, Germany

Laura Hollink, Delft University of Technology, Holland

Antoine Isaac, Vrije Universiteit - Knowledge Representation and Reasoning Group, the Netherlands

Ernesto William De Luca, Universitaet Magdeburg - Data and Knowledge Engineering Group, Germany

Vanesa López, KMI, Open University, UK

Gerard de Melo, Microsoft Research Cambridge, UK

Sergei Nirenburg, University of Maryland - Institute for Language and Information Technologies, USA

Alessandro Oltramari, Carnegie Mellon University, Department of Psychology, Pittsburgh, USA

Jacco van Ossensbruggen, CWI - Semantic Media Interfaces & VU - Intelligent Systems, the Netherlands

Wim Peters, University of Sheffield - Natural Language Processing group, UK

Laurette Pretorius, University of South Africa - School of Computing, South-Africa

James Pustejovsky, Brandeis University – CS Dept., Lab for Linguistics and Computation, USA

Felix Sasaki, University of Applied Sciences Potsdam, Germany

Marta Sabou, Department of New Media Technology – MODUL University, Vienna

Philipp Sorg, AIFB – Karlsruhe Institute of Technology, Germany

Martin Volk, Universitaet Zürich - Institute of Computational Linguistics, Switzerland

Piek Vossen, Vrije Universiteit - Dept. of Language, Cognition and Communication, the Netherlands

Yong Yu, Computer Science and Engineering, Shanghai Jiao Tong University