Ontology Matching

OM-2013

Proceedings of the ISWC Workshop

Introduction

Ontology matching[1] is a key interoperability enabler for the semantic web, as well as a useful tactic in some classical data integration tasks dealing with the semantic heterogeneity problem. It takes the ontologies as input and determines as output an alignment, that is, a set of correspondences between the semantically related entities of those ontologies. These correspondences can be used for various tasks, such as ontology merging, data translation, query answering or navigation on the web of data. Thus, matching ontologies enables the knowledge and data expressed in the matched ontologies to interoperate.

The workshop has three goals:

- To bring together leaders from *academia*, *industry* and *user institutions* to assess how academic advances are addressing real-world requirements. The workshop will strive to improve academic awareness of industrial and final user needs, and therefore direct research towards those needs. Simultaneously, the workshop will serve to inform industry and user representatives about existing research efforts that may meet their requirements. The workshop will also investigate how the ontology matching technology is going to evolve.
- To conduct an extensive and rigorous evaluation of ontology matching approaches through the OAEI (Ontology Alignment Evaluation Initiative) 2013 campaign[2]. The particular focus of this year's OAEI campaign is on real-world specific matching tasks as well as on evaluation of interactive matchers. Therefore, the ontology matching evaluation initiative itself will provide a solid ground for discussion of how well the current approaches are meeting business needs.
- To examine similarities and differences from database schema matching, which has received decades of attention but is just beginning to transition to mainstream tools.

The program committee selected 5 submissions for oral presentation and 11 submissions for poster presentation. 23 matching system participated in this year's OAEI campaign.

Further information about the Ontology Matching workshop can be found at: `http://om2013.ontologymatching.org/`.

[1] `http://www.ontologymatching.org/`
[2] `http://oaei.ontologymatching.org/2013`

Acknowledgments. We thank all members of the program committee, authors and local organizers for their efforts. We appreciate support from the Trentino as a Lab (TasLab)[3] initiative of the European Network of the Living Labs[4] at Informatica Trentina SpA[5], the EU SEALS (Semantic Evaluation at Large Scale)[6] project and the Semantic Valley[7] initiative.

Pavel Shvaiko
Jérôme Euzenat
Kavitha Srinivas
Ming Mao
Ernesto Jiménez-Ruiz

October 2013

[3] http://www.taslab.eu
[4] http://www.openlivinglabs.eu
[5] http://www.infotn.it
[6] http://www.seals-project.eu
[7] http://www.semanticvalley.org/index_eng.htm

Organization

Organizing Committee

Pavel Shvaiko, TasLab, Informatica Trentina SpA, Italy
Jérôme Euzenat, INRIA & LIG, France
Kavitha Srinivas, IBM, USA
Ming Mao, eBay, USA
Ernesto Jiménez-Ruiz, University of Oxford, UK

Program Committee

Manuel Atencia, INRIA &LIG, France
Michele Barbera, SpazioDati, Italy
Zohra Bellahsene, LRIMM, France
Chris Bizer, University of Mannheim, Germany
Olivier Bodenreider, National Library of Medicine, USA
Marco Combetto, Informatica Trentina, Italy
Gianluca Correndo, University of Southampton, UK
Isabel Cruz, The University of Illinois at Chicago, USA
Jérôme David, INRIA & LIG, France
AnHai Doan, University of Wisconsin, USA
Alfio Ferrara, University of Milan, Italy
Bin He, IBM, USA
Wei Hu, Nanjing University, China
Ryutaro Ichise, National Institute of Informatics, Japan
Antoine Isaac, Vrije Universiteit Amsterdam & Europeana, Netherlands
Krzysztof Janowicz, University of California, USA
Anja Jentzsch, Wikimedia Deutschland, Germany
Yannis Kalfoglou, Ricoh Europe plc, UK
Anastasios Kementsietsidis, IBM, USA
Patrick Lambrix, Linköpings Universitet, Sweden
Monika Lanzenberger, Vienna University of Technology, Austria
Vincenzo Maltese, University of Trento, Italy
Fiona McNeill, University of Edinburgh, UK
Christian Meilicke, University of Mannheim, Germany
Peter Mork, Noblis, USA
Axel-Cyrille Ngonga Ngomo, University of Leipzig, Germany
Andriy Nikolov, Open University, UK
Leo Obrst, The MITRE Corporation, USA
Heiko Paulheim, University of Mannheim, Germany
Yefei Peng, Google, USA
Andrea Perego, European Commission - Joint Research Centre, Italy
François Scharffe, LIRMM & University of Montpellier, France

Juan Sequeda, University of Texas at Austin, USA
Luciano Serafini, Fondazione Bruno Kessler - IRST, Italy
Umberto Straccia, ISTI-C.N.R., Italy
Ondřej Zamazal, Prague University of Economics, Czech Republic
Cássia Trojahn, IRIT, France
Raphaël Troncy, EURECOM, France
Giovanni Tummarello, Fondazione Bruno Kessler - IRST, Italy
Lorenzino Vaccari, Autonomous Province of Trento, Italy
Ludger van Elst, DFKI, Germany
Shenghui Wang, Vrije Universiteit Amsterdam, Netherlands
Baoshi Yan, LinkedIn, USA
Songmao Zhang, Chinese Academy of Sciences, China

Table of Contents

PART 2 - OAEI Papers

PART 3 - Posters