

Ontology Matching

OM-2011

Proceedings of the ISWC Workshop

Introduction

Ontology matching¹ 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 ontologies as input and determines as output an alignment, that is, a set of correspondences between the semantically related entities of these 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) 2011 campaign². The particular focus of this year's OAEI campaign is on real-world specific matching tasks involving, e.g., linked open data and biomedical ontologies. 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.

We received 33 submissions for the technical track of the workshop. The program committee selected 7 submissions for oral presentation and 16 submissions for poster presentation. 18 matching systems participated in this year's OAEI campaign. Further information about the Ontology Matching workshop can be found at: <http://om2011.ontologymatching.org/>.

¹<http://www.ontologymatching.org/>

²<http://oei.ontologymatching.org/2011>

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³<http://www.taslab.eu>

⁴<http://www.openlivinglabs.eu>

⁵<http://www.infotn.it>

⁶<http://www.seals-project.eu>

⁷http://www.semanticvalley.org/index_eng.htm

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