Pavel Shvaiko, Jérôme Euzenat, Ernesto Jiménez-Ruiz, Michelle Cheatham, Oktie Hassanzadeh

To cite this version:

HAL Id: hal-01964687
https://hal.archives-ouvertes.fr/hal-01964687
Submitted on 23 Dec 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
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 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 over knowledge graphs. Thus, matching ontologies enables the knowledge and data expressed with the matched ontologies to interoperate.

The workshop had three goals:

- To bring together leaders from academia, industry and user institutions to assess how academic advances are addressing real-world requirements. The workshop strives to improve academic awareness of industrial and final user needs, and therefore, direct research towards those needs. Simultaneously, the workshop serves to inform industry and user representatives about existing research efforts that may meet their requirements. The workshop also investigated how the ontology matching technology is going to evolve, especially with respect to data interlinking, process mapping and web table matching tasks.

- To conduct an extensive and rigorous evaluation of ontology matching and instance matching (link discovery) approaches through the OAEI (Ontology Alignment Evaluation Initiative) 2018 campaign\(^2\).

- To examine new uses, similarities and differences from database schema matching, which has received decades of attention but is just beginning to transition to mainstream tools, or the emerging process matching task.

The program committee selected 5 submissions for oral presentation, treated as long technical papers in the proceedings, and 9 submissions for poster presentation, out of which 3 are treated as short technical papers and 6 as posters in the proceedings. 19 matching systems participated in this year’s OAEI campaign. Further information about the Ontology Matching workshop can be found at: [http://om2018.ontologymatching.org/](http://om2018.ontologymatching.org/).

---

\(^1\)http://www.ontologymatching.org/
\(^2\)http://oaei.ontologymatching.org/2018
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\(^3\) initiative of the European Network of the Living Labs\(^4\) at TrentinoDigitale\(^5\), the EU SEALS (Semantic Evaluation at Large Scale) project\(^6\), the EU HOBBIT (Holistic Benchmarking of Big Linked Data) project\(^7\), the Pistoia Alliance Ontologies Mapping project\(^8\) and IBM Research\(^9\).

Pavel Shvaiko
Jérôme Euzenat
Ernesto Jiménez-Ruiz
Michelle Cheatham
Oktie Hassanzadeh

December 2018

\(^3\)http://www.taslab.eu
\(^4\)http://www.openlivinglabs.eu
\(^5\)http://www.trentinodigitale.it
\(^6\)http://www.seals-project.eu
\(^7\)https://project-hobbit.eu/challenges/om2018/
\(^8\)http://www.pistoiaalliance.org/projects/ontologies-mapping/
\(^9\)http://research.ibm.com/labs/watson/