

Workshop on Ontology Patterns

WOP 2010

Papers and Patterns from the ISWC workshop

Introduction

Since the beginning of the semantic web initiative, ontologies have been referred to as the key tool for implementing the semantic web vision. The way they have been studied in, and brought to, this field has assumed that they are the same kind of ontologies used in artificial intelligence (AI) or studied in philosophy.

However, by looking at the most popular web ontologies we can conclude that this is debatable: On one hand semantic web ontologies have inherited some things from AI and philosophical ontologies, on the other hand web ontologies exhibit another level of simplicity, scalability, and modularity, as well as including contributions from, and being used by, the masses (see also EKAW 2010¹ theme).

Additional evidence of the need for a new ontology design paradigm comes from the growing interest in linked data on the web, which is an amazing breakthrough for the semantic web. The inherent basis of linked data is the data-driven paradigm, as opposed to a concept-driven one. This makes linked data authoring and publication easy but its consumption less than straightforward, especially considering the ontologies currently used for representing them: this constitutes a potential limitation on the possibility of a concrete realization of the semantic web vision in the near future. Ontology Patterns, and their related technologies, could be key for bridging the gap between linked data and ontologies, because they are conceived with simplicity, scalability, and modularity, as well as contributions from, and usage by, the masses in mind, without giving up the inheritance from AI and philosophical ontologies. Hence, Ontology Patterns could drive the next breakthrough for the semantic web.

The aim of WOP is to give researchers and practitioners a stage where to share their latest findings and emerging issues, as well as building a common language for ontology patterns. Furthermore, the WOP community is supported by the ontologydesignpatterns.org initiative, and uses it as its main mean of communication, e.g. for pattern submission, reviewing and discussion outside the workshop schedule. A workshop should be a practical and interaction-rich event, and for this reason WOP had three parts: regular papers, posters/demos, and “pattern writing”, with a focus on the latter. The inspiration for this model comes from the pattern writing workshops for software patterns. The aim is to promote development and review of actual patterns, rather than papers describing patterns. Related events are also VoCamps for writing vocabularies for the Semantic Web.

¹ <http://ekaw2010.inesc-id.pt/>

We received 6 submissions for the paper and poster track of the workshop. The program committee selected three submissions for oral presentation and one submission as position paper. 6 ontology patterns were submitted to the workshop, of which 5 patterns were selected for presentation in the poster session, such patterns are described in these proceedings as extended abstracts. The workshop also included a pattern writing session on proposed modeling issues, which can be found on the workshop web site. Finally, we had a session on late breaking news short presentations. Further information about the Workshop on Ontology Patterns can be found at: <http://ontologydesignpatterns.org/wiki/WOP2010>.

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