

Preface

A picture is worth a thousand words, we often say, yet many areas are in demand of sophisticated visualization techniques, and the Semantic Web is not an exception. The size and complexity of ontologies and Linked Data in the Semantic Web constantly grow and the diverse backgrounds of the users and application areas multiply at the same time. Providing users with visual representations and intuitive user interfaces can significantly aid the understanding of the domains and knowledge represented by ontologies and Linked Data. There is no *one size fits all* solution but different use cases demand different visualization and interaction techniques. Ultimately, providing better user interfaces and visual representations will foster user engagement and likely lead to higher quality results in different applications employing ontologies and to the proliferation of Linked Data usage.

User interfaces are essential to easily provide access to the increasing diversity of knowledge modeled in ontologies. As ontologies grow in size and complexity, the demand for comprehensive visualization and sophisticated interaction also rises. In particular, user interfaces are an integral part of ontology engineering, to help bridge the gap between domain experts and ontology engineers. Ontology visualization is not a new topic and a number of approaches have become available in recent years, with some being already well-established, particularly in the field of ontology modeling. In other areas of ontology engineering, such as ontology alignment and debugging, although several tools have recently been developed, few provide a graphical user interface, not to mention navigational aids or comprehensive visualization techniques.

While ontology users usually possess domain and/or knowledge representation expertise, this is not necessarily the case with potential Linked Data consumers who can come from very different backgrounds and have varying levels of expertise. Currently, the main Linked Data consumers are technology experienced users, one of the reasons being the lack of appropriate user interfaces and visualizations to support other user groups. Visual approaches are needed to assist various kinds of users, who pursue diverse goals and pose individual requirements.

In the presence of a huge network of interconnected resources, one of the challenges faced by the Linked Data community is the visualization of the multidimensional datasets to provide for efficient overview, exploration and querying tasks, to mention just a few. With the focus shifting from a Web of Documents to a Web of Data, changes in the interaction paradigms are in demand as well. Novel approaches also need to take into consideration the technological challenges and opportunities given by new interaction contexts, ranging from mobile and touch interaction to visualizations on large displays, and encompassing highly responsive web applications.

The VOILA! workshop addressed these and related issues in its call for papers and attracted 18 submissions in different paper categories. Three reviewers were assigned to each submission. Based on their reviews we selected 12 contributions for presentation at

the workshop in the following categories: full research papers (5), position papers (2) and short papers (5).

The first edition of VOILA! is co-located with the 14th International Semantic Web Conference (ISWC 2015) and will take place as a full day event on October 11, 2015 in Bethlehem, Pennsylvania, USA. It will be organized around paper presentations and discussions and will be accompanied by interactive software demonstrations, giving developers a chance to gather feedback from the community.

We thank all authors for their submissions and all members of the VOILA! program committee for their useful reviews and comments. We are grateful to Miriam Fernandez and Krzysztof Janowicz, the ISWC workshop chairs, for their continuous support during the workshop organization. The workshop would not be possible without all of you!

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