Preface to WISM 2014

The invited paper by Suarez and Jimenez-Guarin presents SPEAk, a high-level architecture and its implementation as a Semantic Web application that integrates government information with online news. SPEAk aims to better assist citizens in making informed political decisions based on both government and non-government sources. The core of the architecture is a named entity recognition component that associated entities recognized in news text to entities from a knowledge base. The proposed approach is positively evaluated using news articles, and a knowledge base using open government data and freebase data.

The first paper by Pinto and Parreiras presents a literature survey on the use of Semantic Web technologies in enterprises, i.e., on Linked Enterprise Data. The authors observe that these technologies are mainly used for integrating internal data sources only. The survey concludes on the need to investigate the benefits of interlinking internal and external enterprise data in the future.

The second paper by Vandic et al. proposes a framework for populating a product ontology with tabular product data from Web shops. Having the product information formalized in this manner allows one to produce better comparison and recommendation applications. Several lexical and syntactic matching techniques are used for mapping properties and instantiating values. The proposed framework is positively evaluated using consumer electronics products from three Web shops.

The third paper by Cao et al. formalizes service behavior as an ontology-annotated service flow net. Besides the ontological extensions the proposed approach adds implicit choice and loop constructs to regular flow nets, further increasing their expressivity. Using model transformations on previously specified service behavior one can automatically check the service adaptability (i.e., interface compatibility for two Web services).

The fourth and last paper by Becha and Sellami defines a consumer-centric non-functional properties-based Web service selection approach. The proposed solution has three steps: filtering for removing services that do not obey hard non-functional properties, matching for finding functionally-equivalent services, and ranking for sorting services based on matching soft non-functional properties. Due to the filtering step, the proposed approach is faster than a classical one for selecting Web services that satisfy user-defined functional and non-functional requirements.

We do hope that the exciting WIS modeling topics listed above invite the reader to have a closer look at the workshop proceedings. Last, we would also like to thank all the authors, reviewers, participants, and ER 2014 workshop chair for their input and support of the workshop.

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