Proceedings of the International Workshop on Semantic Technologies meet Recommender Systems & Big Data
SeRSy 2012

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Preface

These are the proceedings of the First Workshop on Semantic Technologies meet Recommender Systems & Big Data (SeRSy 2012), held in conjunction with the 11th International Semantic Web Conference (ISWC 2012).

People generally need more and more advanced tools that go beyond those implementing the canonical search paradigm for seeking relevant information. A new search paradigm is emerging, where the user perspective is completely reversed: from finding to being found.

Recommender Systems may help to support this new perspective, because they have the effect of pushing relevant objects, selected from a large space of possible options, to potentially interested users. To achieve this result, recommendation techniques generally rely on data referring to three kinds of objects: users, items and their relations. The widespread success of Semantic Web techniques, creating a Web of interoperable and machine readable data, can be also beneficial for recommender systems. Indeed, more and more semantic data are published following the Linked Data principles, that enable to set up links between objects in different data sources, by connecting information in a single global data space – the Web of Data. Today, the Web of Data includes different types of knowledge represented in a homogeneous form – sedimentary one (encyclopedic, cultural, linguistic, common-sense, …) and real-time one (news, data streams, …). This data might be useful to interlink diverse information about users, items, and their relations and implement reasoning mechanisms that can support and improve the recommendation process.

The challenge is to investigate whether and how this large amount of wide-coverage and linked semantic knowledge can significantly improve the search process in those tasks that cannot be solved merely through a straightforward matching of queries and documents. Such tasks involve finding information from large document collections, categorizing and understanding that information, and producing some product, such as an actionable decision. Examples of such tasks include understanding a health problem in order to make a medical decision, or simply deciding which laptop to buy. Recommender systems support users exactly in those complex tasks.

The primary goal of the workshop is to showcase cutting edge research in the intersection of semantic technologies and recommender systems, by taking the best of the two worlds. This combination may provide the Semantic Web community with important real-world scenarios where its potential can be effectively exploited into systems performing complex tasks.

We wish to thank all authors who submitted papers and all workshop participants for fruitful discussions. We would like to thank the program committee members and external referees for their timely expertise in carefully reviewing the submissions. We would also like to thank our invited speaker Ora Lassila for his interesting and stimulating talk.

October 2012

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