Call for Papers

Journal of Web Semantics
Special Issue on "Bridging the Gap"
Data Mining and Social Network Analysis for integrating Semantic Web and Web 2.0

The last years have seen increasing collaboration of researchers from the Semantic Web, Web 2.0, social network analysis and machine learning communities. Applications that use these research results are achieving economic success. Data now become available that allow researchers to analyze the use, acceptance and evolution of their ideas.

Highly popular user-centered applications such as Blogs, social tagging systems, and Wikis have come to be known as "Web 2.0". A major reason for their immediate success is the high ease of use of new Web 2.0 services. These sites do not only provide data but also generate an abundance of weakly structured metadata. A good example is tagging. Here, users add keywords from an uncontrolled vocabulary, called tags, to a resource. Such metadata are easy to produce, but lack any kind of formal grounding, as used in the Semantic Web.

The Semantic Web can complement the bottom-up effort of the Web 2.0 community in a top-down manner. Its central point is a stronger knowledge representation based on some kind of ontology with a fixed vocabulary and typed relations. Such a structure is typically something users have in mind when they provide their information in Web 2.0 systems. However, for further use, this structure is hidden in the data and needs to be extracted. Techniques to analyze network structures or weak knowledge representations as can be found in the Web 2.0 have a long tradition in different other disciplines, like social network analysis, machine learning and data mining. These kinds of automatic mechanisms are necessary to extract the hidden information and to reveal the structure in a way that the end user can benefit from it. Using established methods to represent knowledge gained from unstructured data will also be beneficial for the Web 2.0 in that it provides Web 2.0 users with enhanced Semantic Web features to structure their data.

For this special issue, we invite contributions which show how synergies between Semantic Web and Web 2.0 techniques can be successfully used. Since both communities work on network-like data structures, analysis methods from different fields of research could form a link between those communities. Techniques can be - but are not limited to - social network analysis, graph analysis, machine learning and data mining methods.

Topics of interest
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Topics of interest for this special issue include, but are not limited to:
Notification:  
15-Dec-2009

Final versions submitted by  
15-Jan-2010

Tentative Publication:  
April 2010

* ontology learning from Web 2.0 data  
* instance extraction from Web 2.0 systems  
* analysis of Blogs  
* discovering social structures and communities  
* predicting trends and user behaviour  
* analysis of dynamic networks  
* using content of the Web for modelling  
* discovering misuse and fraud  
* network analysis of social resource sharing systems  
* analysis of folksonomies and other Web 2.0 data structures  
* analysis of Web 2.0 applications and their data  
* deriving profiles from usage  
* personalized delivery of news and journals  
* Semantic Web personalization  
* Semantic Web technologies for recommender systems  
* ubiquitous data mining in Web (2.0) environment  
* applications

In accordance with the focus of the journal, the relatedness of your submission to the Semantic Web will be an important evaluation criterion.

Submission Details

Submissions should describe original contributions and should not have been published or submitted elsewhere. Submissions based on conference papers should be extended and include a reference to the corresponding proceedings. All submissions will be reviewed by at least two reviewers. Final decisions on accepted papers will be approved by an editor in chief.

Manuscripts should be prepared for publication in accordance with instructions given in the "Guide for Authors":

<http://www.elsevier.com/wps/find/journaldescription.cws_home/671322/authorinstructions>

The submission and review process will be carried out using Elsevier's Web-based EES system, cf. <http://ees.elsevier.com/jws/>

All manuscripts and any supplementary materials should be submitted through this website. Authors must select “Special issue: Data Mining and SNA” when reaching the Article Type step. First time users must register themselves as Author.