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Utilizing Social Bookmarking Tag Space for Web Content Discovery: A Social Network Analysis Approach

By

Wei Wei, PhD

Department of Computer Information Systems, University of Houston, Clear Lake (Texas, USA)

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Biography

Dr. Wei Wei is an Assistant Professor in Computer Information Systems at the University of Houston-Clear Lake, where she has been a faculty member since August, 2012.

Dr. Wei Wei completed her Ph.D. at the University of Arizona with major in Management Information Systems and minor in Economics. During her graduate study, she worked in the Advanced Database Research Group (ADRG) where she worked on various research projects including biological and genomic data modeling, genomic database integration, scientific and engineering data modeling. In recent years, she has geared her research interests toward social media analytics. The fundamental question she is interested in is how we can benefit from the "wisdom of crowds" by analyzing the large amount of social data generated by various social media applications.

Dr. Wei Wei taught classes such as Information Systems Theory and Practice, Modern System Analysis and Design, Design of Databases, Databases Management for Managers, Strategic Information Systems, etc. She recently developed and delivered a new course Data Warehousing and Business Intelligence at UHCL for graduate students.

Dr. Wei is a member of ACM. In her spare time, Wei enjoys reading and cooking.

Abstract

Social bookmarking has gained popularity since the advent of Web 2.0. Keywords known as tags are created to annotate web content, and the resulting tag space composed of the tags, the resources, and the users arises as a new platform for web content discovery. Useful and interesting web resources can be located through searching and browsing based on tags, as well as following the user-user connections formed in the social bookmarking community. However, the effectiveness of tag-based search is limited due to the lack of explicitly represented semantics in the tag space. In addition, social connections between users are underused for web content discovery because of the inadequate social functions. In this research, a comprehensive framework to reorganize the flat tag space into a hierarchical faceted model is proposed. The structure and properties of various networks emerging from the tag space for the purpose of more efficient web content discovery are also studied.

Dr. Wei Wei