

Using Social Relationships for Searching Relevant Information

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Web is experiencing huge growth in recent years. What was formerly accessible only to few people and universities, nowadays is now available to common people and constitutes the most extensive communication tool available in the world. It is the largest, most widely known and most accessible source of information.

Internet enabled communication and connections between people from its beginning. In the beginning there was e-mail, later there were IRC channels and portals that enabled communication between people. Presently, social networks contain a significant part of communication between people in contrast to other communication tools. People exchange messages, photos, videos and look for new friends.

When users search for new friends, they proceed by their private preferences. In present days, there is ever more personal information available about people. Somebody wrote this information about some other person or, especially in recent years, some people wrote this information about themselves. They use various portals for presenting their knowledge, discussion forums for presenting their opinions, blogs for expressing some experience, social networks for communication with friends and photos for saving their memories. We can thus conclude that if users actively use all aforementioned communication and presentation tools, we can get complex view about their personality. On many sites there is information about the same people, and at the same time, many times these are only namesakes with nothing in common.

If we use search engines to search for information about people, their knowledge, opinions, photos or contacts we receive scattered information and must browse many pages to get a decent overview. Many times, the same information is found in different locations and different formats. These various pages with much information about people can be integrated and presented in a coherent form to users or used for further information retrieval tasks.

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In the huge amount of data stored in the Web, it is hard to find information with proper quality and relevance. Using social relationships can help us to search for information, choosing and better specification of the desired information.

Since we often have friends who are similar to us, we can exploit this fact to choose better, more relevant information. These friends have their own interests, they browse their favourite pages, they publish information about themselves and all this can help us to find better and more relevant information. As we pass through the process of getting information about people, then about their friends and then we find the information, we also pass through some possibilities of searching and storing information in these phases.

We search for information about people via regular expression and by means of predefined rules. We deal with using different formats for storing information about people - such as vCard or microformats, and also the PIMO format, which is Personal Information Model for description of personal data and can be used in the Semantic Web. Another interesting format is IMS Enterprise 1.1 XML Binding, which can, beside personal information, also store information about processes. Of course, beside text formats for storing information we examine possibilities to store this data into a properly created database structure.

The next phase is searching and storing information about social connections between people. We examine possibilities of getting information about people from pages and also their search dynamics. The last phase is searching for information via profiles of people exploiting the idea that we search for friends who are similar to us.

In this process of searching for relationships and information, we use algorithms for searching information inspired by behaviour of social insects and work with search inspired by algorithms of fuzzy ants.

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