

Call for Papers

Special Topic Issue of *Information Processing & Management*

Soft Approaches to Information Access on the Web

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The Web has become the largest available repository of multimedia information. The huge growth and the fast rate of change of the Web make it really hard to retrieve information relevant to specific users' needs. Web data are typically unlabelled, distributed, heterogeneous and time varying. Hence, many interesting research topics have emerged recently to improve the information access on the Web, e.g., identifying and removing malicious content and linking, identifying content of good quality, exploiting user feedback, and improving query languages.

Subjectivity, vagueness, and imprecision are typical properties of any information access activity on the Web. A promising direction to improve the information access on the Web is to model the subjectivity and vagueness by means of the application of soft computing (SC) based information handling techniques. The concept of SC was introduced by Lotfi Zadeh as a synergy of methodologies which collectively provide a foundation for the conception, design, construction and utilization of adaptive and flexible systems. Some of the main methodologies encompassed by SC are fuzzy logic, genetic algorithms, neural networks, rough sets, Bayesian networks and other probabilistic techniques. The main characteristic of SC is that it is tolerant to imprecision, vagueness, partial truth, and approximation. The key point of SC is to provide an acceptable solution at low cost by seeking for an approximate solution to problems. SC techniques have been used satisfactorily to improve information retrieval processes. With such tools it is possible to define flexible approaches to improve personalized information access processes on the Web. In particular, we think that the use of SC based tools can contribute satisfactorily to solve the various problems that have recently been identified in Web access.

Specific topics of interest of this Special Issue include, but are not limited to, the following:

- Information retrieval systems
- Recommender systems
- Web intelligent agent systems
- Digital libraries
- Web quality evaluation
- Multilingual information systems
- Internet meta-searcher systems
- Web related technologies in data representation and querying
- Information filtering systems
- Database systems
- Intelligent database interfaces
- Hypermedia information systems
- E-commerce applications
- Text categorization on the Web
- Semantic Web

where the information access processes are modeled and/or managed using SC techniques. The guest editors seek papers that discuss research in the area of "Soft Approaches to Information Access on the Web."

To aid planning and organization, please send an e-mail to any of the guest editors expressing your intention to submit a paper, including:

- authors' information,
- a tentative title,
- abstract,

as soon as possible (preferable by December 15, 2009).

The deadline to send manuscripts for consideration for publication in this special issue is **February 15, 2010**. All manuscripts will be reviewed by a selected panel of referees.