
International Journal of Web Applications Volume 5 Number 1 March 2013

Contents

Editorial

i

Research

Probabilistic Query Expansion Method Based on a Query Recommendation Algorithm-
Btihal El Ghali, Abderrahim El Qadi, Omar El Midaoui, Mohamed Ouadou, Driss Aboutajdine

1

An Agent Oriented Approach for Modeling Web Services in Mobile Environments-
HAMIDA Souraya, KAZAR Okba, AMGHAR Youssef

13

Semantic Approach for Web Information Monitoring-
Wieslaw Lubaszewski, MichalKorzycki, Krzysztof Dorosz

27

Email Ontology Learning System Based on Fuzzy Logic-
Majdi Beseiso, Abdul Rahim Ahmad, Roslan Ismail

37

Short Paper

How long can Facebook survive?
Complex Physics Model for Predicting the Life Cycle of Social Network-
Yingqiong GU

46

Book Review

49

Conference Notification

50

- The Fifth International Conference on the Applications of Digital Information and Web Technologies (ICADIWT 2013)
- The Eighth International Conference on Digital Information Management (ICDIM 2013)

Editorial

We are pleased to release the first issue of the fifth volume of the International Journal of Web Applications. (IJWA). This issue has five research pieces as described below.

The Query Recommendation Algorithms contribute to the Query Expansion methods in semantic-rich way. *Btihal El Ghali, Abderrahim El Qadi, Omar El Midaoui1, Mohamed Ouadou and Driss Aboutajdine* in the first paper on **'Probabilistic Query Expansion Method Based on a Query Recommendation Algorithm'** based on a list of past user queries, extracted the most associated queries to the input query, and used it in a Probabilistic Query Expansion method. Based on the experimentation, they found that their approach produced best results except in the case of using four Recommended Queries (RQs) for short input queries.

In the modern mobile environment, the Mobile Web Service offers new personalized services to consumers on their mobile devices. *HAMIDA Souraya, KAZAR Okba and AMGHAR Youssef* in their paper on **'An Agent Oriented Approach for Modeling Web Services in Mobile Environments'** have proposed the integration of two modern service technologies: Web Services and Mobile Agents which enabled wireless users to access and invoke semantically enriched Web services without the need for simultaneous and online presence of the service requestor they claimed. When they used semantic registries they found it has provided semantic matching to service queries and published service descriptions.

In the next paper **'Semantic Approach for Web Information Monitoring'**, the authors *Wieslaw Lubaszewski, MichalKorzycki and Krzysztof Dorosz* have used the MPI (Monitor for Polish language Internet) system for web monitoring. First, they examined the MPI architecture with the description of the functions and role. Further they used the Conceptual Dependency model with advanced semantic scripts to understand web monitoring.

Majdi Beseiso, Abdul Rahim Ahmad and Roslan Ismail in the fourth paper on **'Email Ontology Learning System Based on Fuzzy Logic'** proposed to use a fuzzy logic based system as it is quite suitable for identifying and addressing the vagueness and ambiguity in the natural languages in the context of email ontologies. Their model has deployed fuzzy logic which helped to tackle the ambiguity of pronouns which act as important agents in ontology development. They in their experiment found that the results lead to produce accuracy in the representation of ontologies in various domains of emails.

In the last short paper on **'How long can Facebook survive?'**, the author *Yingqiong Gus* has provided an architecture by combining the characteristics of a few popular social networks such as Facebook, myspace.com and twitter.com. Such an architecture will enable to predict the future generation social networks and the expected changes. This paper concept has good room for expansion.

This issue has many interesting innovative papers on web applications.

Editors