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Editorial

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This special issue of *Software: Practice and Experience* contains extended versions of the best papers accepted for the Web Technologies (WT) track of the 25th ACM Symposium on Applied Computing (SAC), which was held in Taichung, Taiwan in March 2011.

In recent years the WT track has attracted an increasing number of high-quality contributions on *everything web*, by researchers and practitioners from both industry and academia. Because of the nature of the Web, the applied research on these topics has the distinctive potential of leading to tangible changes in our everyday experience in a very short time frame. We are honored to have been able to witness such evolution serving as track chairs for the last 4 years, and we hope to give you a representative glimpse of it with the articles contained in this special issue.

In 2011, the WT track has received 31 submissions from 19 countries and accepted ten full papers (for an acceptance rate of about 32%). In addition to that, three submissions have been presented as posters on-site, during the SAC conference. We have selected four among the best papers of the 2011 edition, with a focus on recent evolution of the World Wide Web as an *everyday and for everyone platform*.

One of the characterizing aspects of the Web today is the ever increasing participation of users in writing, commenting, and annotating content. However, the heterogeneity of publishing platforms, the heterogeneity of users' contributions, and the heterogeneity of data formats risk to hinder the full discovery and exploitation of such information. Three of the papers presented here investigate how to automatically detect, make explicit, and increase the value of such user-generated content, in different contexts and with interesting peculiarities.

1. In *Visualizing Online Dispute Dynamics in Replying Comments*, Yunjung Lee, Eunkyung Kim, Hwangue Cho, and Gyun Woo present a novel approach to identify disputes in a stream of comments in Web forums. Differently from existing solutions that basically process the actual content of posts and are language dependant, this approach relies on the temporal order of the posts: studying recurring patterns (basically ordered pairs of comments), the authors were able to successfully detect disputes in some Korean forums, with an extensible approach that can be applied to other languages and discussion platforms. The detection system is also coupled with a visualization tool that takes as input the statistical data about disputes and shows in a very intuitive way the relationships between commenters, along with the frequency and intensity of their discussions.

2. In *Automatic Review Identification on the Web Using Pattern Recognition*, Jeroen van der Meer and Flavius Frasincar address the automatic detection of users' reviews about pages, products, articles, and so on. The authors propose a modular algorithm built on top of a preliminary analysis of the most recurring patterns in the structural organization of reviews (in containers, subcontainers, blocks, etc.) and in the use of lexical expressions (mostly subjective and personal). The approach is however extensible and easy to customize for other application

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domains. The papers also present a running system, called ARROW, that implements this algorithm and includes a module to export such information in RDFa, making it interoperable with other systems, such as search engines, annotators, and RSS feeders.

3. The focus shifts on folksonomies in the paper *Exploiting tag similarities to discover synonyms and homonyms in folksonomies*, by Davide Eynard, Luca Mazzola, and Antonina Dattolo. The authors tackle the problem of detecting synonyms and homonyms among tags in a new combined way: mapping real data into a simplified theoretical model, derived from tripartite graphs, the authors evaluate the type and strength of each connection between tags and look for synonyms and homonyms in the same search space. The paper also presents a modular framework to test this technique in combination with, and in contrast to, other solutions. The platform, used to collect the experimental results discussed in this work, is also extensible with other analyzers to support data disambiguation and mining on folksonomies.

4. In *Fault Tolerant Timestamp-Based Two Phase Commit Protocol for RESTful Services*, Luiz Alexandre Hiane da Silva Maciel, and Celso Massaki Hirata present an improved version of TS2PC4RS, a two-phase commit protocol supporting concurrent access to REST resources that also enable fault tolerance. The key idea of the algorithm is to record logs of events during the execution of TS2PC4RS and implement recovery procedures in case of errors. Host and connection failures are handled in the current implementation. The paper shows in detail how different cases of crash and message loss are solved by this approach. The possibility of generalization makes this solution stronger: originally designed for TS2PC4RS, the basic concepts and rules can be applied to other protocols for Web transactions.

Given its focus on the dissemination of tangible software experiences, *Software: Practice and Experience* is a perfect match for both the research topics and the mixed academic/practitioner approach of the WT track of ACM SAC.

We are therefore confident to meet your interests, and we would like to wish you a very good read!

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