Preface

Eric Pardede

Department of Computer Science and Computer Engineering
La Trobe University
Bundoora VIC 3083, Australia
E-mail: E.Pardede@latrobe.edu.au

Biographical notes: Eric Pardede received his PhD in Computer Science in 2006. He is currently a Lecturer in the Department of Computer Science and Computer Engineering, La Trobe University, Australia. His current research interests include XML and Web data management, mobile database, data quality and data integration. He has published nearly 30 papers in journals, books and various international conferences and workshops. He has co-authored a book entitled *Object-Oriented Oracle*. He is serving as programme chair, publicity chair and organiser of several international conferences and workshops. He is also serving as programme committee member and reviewers for various conference and journals.

In this issue, we present five research papers in the area of measurement, provision, and scheduling in web and grid information system.

In the first paper, Ding and Zhou investigate the way to improve accuracy in website search. The authors use server log analysis, which contains a rich source of information on how users access a website to extract terms for building web representation. It is used as a new source of evidence for website search. This new evidence is combined with text-based and anchor-based evidence. The experiments show that the approach can improve the effectiveness of website search.

The next paper deals with web information systems design. Schewe and Thalheim explore the use of storyboard to describe a web information system. While existing works investigated the syntax and semantics of storyboard, the authors investigate the pragmatical aspects of this abstraction technique. Three major aspects are introduced, namely: life cases, user models and contexts. The story space of the storyboard is introduced in life cases. The facets and the semi formal way to document the life cases are also presented. The actor profile of the storyboard is explained in the user models identification. Then, the contexts are analysed to see the impact of the storyboard in general, the life cases and the user models.

In the next paper, Luoma uses a fuzzy interpretation of XPath for developing relevance ranking in XML information retrieval. The use of axes relevances for ranking is a novel approach as opposed to content and containment relationship based ranking. The proposal is then implemented with a prototype based on a relational database.

In the web service area, we present the paper by Mostéfaoui and Younas. The authors highlight the need to include services context and transaction model for services provisioning. They enhance the current web service standard with a context-aware feature, which is called the Context-Based Web Service Description Language (CWSDL). It ensures that the best service offers are selected in the service composition. They also use extended transaction model, as opposed to traditional ACID transaction model, to deploy a service. It helps improving the reliability and efficiency of the composite services.

The final paper raises an issue in grid service management. Due to the complexity of resource allocation in a grid system, Xhafa *et al.* propose immediate mode scheduling. In this mode, jobs are allocated as soon as they arrive in the system. The authors implement five immediate scheduling methods, namely: Opportunistic Load Balancing, Minimum Completion Time, Minimum Execution Time, Switching Algorithm and k-Percent Best. The measured performance for these schedules is based on four parameters: makespan, flowtime, resource utilisation and matching proximity by a simulation benchmark. The results can be used to identify the methods that perform better for certain set of parameters.