Editorial

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Biographical note: Eric Pardede received the Master of Information Technology degree and PhD degree in Computer Science from La Trobe University, Melbourne, Australia, in 2002 and 2006, respectively. He is currently a Lecturer with the Department of Computer Science and Computer Engineering, La Trobe University. He has published more than 50 research articles in books, journals and conference proceedings. He has wide range of teaching and research experience including in the area of databases, software engineering, information systems and entrepreneurship.

In this special issue, we present selected papers from the 13th International Conference on Information Integration and Web-based Applications and Services (iiWAS2011), held in Ho Chi Minh City, Vietnam from the 5th to the 7th of December 2011. The papers have been extended significantly from their conference version, to include a thorough literature review and more advanced result.

This issue highlights the increasing amount of freely available data on the web and the increasing usage of this data for various purposes in research and business. The papers in this issue present new methods and advanced applications that are needed to process the sheer amount of data for decision making.

In the first paper, *Hoang, Priebe and Tjoa*, tackle the issue of high volume and complexity of current data warehouse. Traditional ways of querying and analysis data from current data warehouses are increasingly less user-friendly. They propose a Hypergraph Query-by-Example (HQBE) technique that employs GUI for data browsing and query. The method includes the translation of the visual HQBE into a hypergraph query for execution and result output. The query, which is based on hypergraph theory is a useful solution for efficient data analysis.

Since there is increasing use of information from the internet, both in the forms of files and web pages, the ability to track the previously accessed files and web pages for further reference or use is necessary. To aid this, *Song, Watanabe and Yokota* propose a methodology to merge file-access and web-access logs into virtual folder. They propose two approaches and the evaluation is conducted using accuracy and execution time parameters.

In the next paper, *Takaoka and Nadamoto* present their initial work on the development of a search engine system based on words-of-wisdom. The search engine aims to process and to analyse the inputs from users that demonstrate the users' sentiments. The search system prototype is developed and experiments are conducted by selecting a set random of words-of-wisdom. The result is promising for some sentiments, but proven not satisfactorily for certain sentiments.

In the next paper, *Doshi, Malhotra, Bressan and Lam* demonstrate the use of sheer volume of freely available data for business intelligence, in this case to discover market trends of shipping companies and to measures selected quality parameters for several Asian marine ports. The authors use maritime schedules from the web and transform the data into several shipping networks graph. With the shipping network graphs complete, they propose several centrality measures such as degree, betweenness, closeness and eigenvector centrality.

He, Li and Yoshi, in the next paper, propose a new method to classify multivariate time series data that is commonly found in financial, multimedia, medical and industrial fields. To achieve this, the authors extend the traditional decision forest with soft discretisation based on fuzzy set theory. The experiment shows the robustness of the proposal in dealing with noise and uncertainty, which is very common in multivariate time series data.

In the final paper, *Nguyen, Kato, Hashimoto and Yokota* extend Maximum Margin Clustering (MMC) technique to generate researchers' research history by exploiting meta-information of their past papers. For evaluation, the authors compare their proposed methods with clustering technique using k-means algorithm.

To conclude the special issue, the guest editor and iiWAS2011 organiser would like to thank IJBIDM Editor-in-Chief and Inderscience for the collaboration opportunity. We would also like to thank the authors who have prepared and revised the papers in timely manner.