In the last issue of JRPIT I mentioned that the next Australasian Computer Society Week (ACSW 2007) will be held from 30 January 2007 to 2 February 2007 at the University of Ballarat. I would like to announce an exciting addition to the program. On the day prior to ACSW 2007, the inaugural Australasian Computing Doctorial Consortium (ACDC) is being held at the same site. This will be a wonderful opportunity for current doctoral students to showcase their research projects and get advice from established researchers. The eligibility details and application procedure can be found on the ACSW 2007 web site: http://www.ballarat.edu.au/acsw

On to the offerings for this issue:

The first paper, “ERP Systems Success: An Integration of IS Success Model and Balanced Scorecard” is by Hua-Yang Lin, Ping-Yu Hsu and Ping-Ho Ting. “In the last decade, many companies have turned to information systems, usually known as enterprise resource planning (ERP) systems, to respond to competitive pressures and market opportunities.” “The aim of this research is to address ‘how ERP systems success can be usefully measured’ with a combination of IS success model and a balanced scorecard to capture both financial and non-financial aspects of ERP systems measurement.”

In the next paper, “Data Mining a New Pilot Agriculture Extension Data Warehouse” by Ahsan Abdullah and Amir Hussain, the implementation of a “Pilot Agriculture Extension Data Warehouse” is discussed. “To monitor cotton growth, different government departments and agencies in Pakistan have been recording pest scouting, agriculture and metrological data for decades. Coarse estimate of just the cotton pest scouting data recorded stands at around 1.5 million records.” “The primary agro-met data recorded has never been digitized, integrated or standardized to give a complete picture, and hence cannot support decision making. In this paper, a complete life-cycle implementation of a novel Pilot Agriculture Extension Data Warehouse is discussed, followed by data analysis by querying the Data Warehouse and some interesting findings through data mining using an indigenous technique based on the crossing minimization paradigm.”

The third paper in this issue is “A Bucket-Based Approach to Query Rewriting Using Views in the Presence of Inclusion Dependencies.” “A number of algorithms based on the use of either buckets or inverse rules have been proposed to address the problem of query rewriting using views. Some inverse rule-based algorithms have considered this problem in the presence of inclusion dependencies. However, no bucket-based algorithms have considered the influence from inclusion dependencies, resulting in missing some query rewritings under this condition.” In this paper, the authors, Qingyuan Bai, Jun Hong, Michael F. McTear, and Hui Wan “utilize inclusion dependencies to overcome this deficiency. They present two novel algorithms in the buckets framework.”

The fourth and final paper in this issue is “A Novel Statistical Distortion Model Based on Mixed Laplacian and Uniform Distribution of Mpeg-4 FGS”, by Xie Li and Wenjun Zhang. “Scalable coding is a new video encoding technology designed deliberately for the Internet environment.” The authors propose a new model to address distortion of video transmission. They discuss the results of their experiments with “the novel distortion model based on mixed Laplacian and Uniform distribution” and show that it “can approximate to the real empirical data very well.”

Our next issue, and the final one for 2006, contains a special collection of papers that were presented at the International Conference on Software Engineering Research and Practice 2005 (SERP ‘05) held mid-year in Las Vegas, Nevada, USA. “Current research in software engineering area has resulted in the definition of a number of methodologies and techniques for model development and code generation throughout the system development life cycle. Coupled with these many research approaches are techniques for transforming from one level of system
abstraction to another visa-a-visa architectural and design models, and code. The motivation for this latter area of research is sparked by the successful applications of the many system architectural and design description languages and notations, and the need to integrate the best aspects of these methodologies and techniques.” The Guest Editors, Dr Hassan Reza and Dr Emanuel S. Grant, have assembled a collection of papers that showcase the current research in this important area.

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