

The first article in this bumper issue of JRPIT is by Alex Zenlinsky and is titled “Reinventing ICT Research”. Alex is the Director of the newly created ICT Centre within CSIRO and here he describes what it is hoped and expected that the Centre will do.

The second paper, by Shirley Gregor and Hugh Roberts, is titled “Why Australian Merchants Aren't Adopting E-Money”. “This study investigated the characteristics of modern Australian e-money products perceived as most problematic by Australian merchants.”

The third paper is by Bruce Armstrong, Gerard Fogarty, Don Dingsdag, and Julian Dimpleby and is titled “Validation of a Computer User Satisfaction Questionnaire to Measure IS Success in Small Business”. “This study has provided evidence for the factorial validity of a short questionnaire that can be used to measure the level of perceived success of Computer Based Information Systems (CBIS) in small business, as judged by user satisfaction ratings. The shortness of the questionnaire (13 items) means that it can be administered quickly. Its brevity is also an advantage in that it can be integrated into a longer questionnaire seeking information on other aspects of CBIS.”

The fourth paper is by Heping Pan, Chandima Tilakaratne, and John Yearwood and is titled “Predicting Australian Stock Market Index Using Neural Networks Exploiting Dynamic Swings and Intermarket Influences”. This article aims to discover an effective neural network or a set of adaptive neural networks to predict the Australian stockmarket index – AORD. Curiously, a 6-day cycle was discovered during the studied period. The authors claim the direction of movement of the index was predicted with 80% accuracy.

The fifth paper is by Michelle O'Brien and John Yearwood and is titled “Decisions Surrounding Adverse Drug Reaction Prescribing: Insights from Consumers and Implications for Decision Support”. This article “presents findings from case studies of health consumers who each suspect they may have experienced an adverse drug reaction (ADR). These case studies are part of a larger study involving consumer/doctor decisions surrounding suspected adverse drug reactions and prescribing. Decision support to assist with the diagnosis and management of ADRs has, to date, primarily focussed on providing in-time information to prescribers about factors that pertain to the consumer and the medications they are taking. Decision support that includes consumers usually targets treatment decisions. The results of this paper indicate the prescriber is only one decision contributor in a rich tapestry of decision contributors and decision types, and consumer decision types are significantly broader than treatment decisions.”

The sixth paper is by Ranadhir Ghosh and Moumita Ghosh and is titled “An Intelligent Offline Handwriting Recognition System Using Evolutionary Neural Learning Algorithm and Rule Based Over Segment Data Points”. The authors propose “a novel technique of using a hybrid evolutionary method, which uses a combination of genetic algorithm and matrix based solution methods”.

The seventh paper, one of the Best Papers at the Twenty-Sixth Australasian Computer Science Conference, is by Robert Dale, Sabine Geldof and Jean-Phillipe Prost and is titled “Using Natural Language Generation in Automatic Route Description”. The authors present “a framework and architecture for generating route descriptions that approximate the naturalness of human generated route descriptions. Unlike other attempts towards this goal, the approach allows the user to take as input GIS data like that currently used by commercial systems, and uses generic natural language techniques in constructing the resulting textual output.”

The eighth paper, another of the Best Papers at the Twenty-Sixth Australasian Computer Science Conference, is by Stuart Norcross, Ron Morrison, Dave Monro, Henry Detmold and Katrina Falkner and is titled “Implementing a Family of Distributed Garbage Collectors”. This paper demonstrates the practical application of a distributed garbage collector derivation methodology.

The ninth and final paper is by Saeed Parsa and Omid Bushehrian and is titled “A New Encoding Scheme and a Framework to Investigate Clustering Algorithms”. “In this paper a new encoding scheme and a software environment, called, DAGC, to develop and evaluate genetic clustering algorithms is described. DAGC facilitates experiments with genetic clustering algorithms by providing an extensible library of components to assemble new algorithms or modify existing ones.”



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