

EDITORIAL PREFACE

Privacy on Services Selection and Infrastructure 2014, Shenzhen, China

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This issue of the International Journal of Web Services research (JWSR) collects five papers selected from regular submissions.

The first paper is titled *Tx-FAITH: A Transactional Framework for Failure Tolerant Execution of Hierarchical Long-running Transactions in Business Applications*. Rajaram, Chitra, and Adithan tackle the challenge of ensuring reliable execution of composite services in the context of unreliable Internet environment. They present a transactional coordination framework featuring of handling the cancellation recovery under external interruptions and cancellations of transactions. Empirical study is also reported.

The second paper is titled *Redundancy-Based Reliability Enhancement for Composite Services*. Wang, Wang, Chu, and Xu tackle the reliability issue of distributed service systems. They propose a collection of algorithms to pursue an optimal balance between the reliability improvement and the total cost. A set of experiments were designed and conducted to prove the effectiveness of the proposed approach.

The third paper is titled *A Sub-Chain Ranking and Recommendation Mechanism for Facilitating Geospatial Web Service Composition*. Zhou, Cheng, Ning, Li, and Zhang tackle the issue of finding a composition (or chain) of services within Open Geospatial Consortium Web services (OWSs), given user requirements. They propose to measure the similarity between parameters of operations through considering the semantic similarity between the name and text description of the parameters, which represents the invocation possibility between operations. Evaluation results are reported.

The fourth paper is titled *A Low-Delay, Light-Weight Publish/Subscribe Architecture for Delay-Sensitive IOT Services*. Chen and Jin tackle the challenge of automatic QoS-ensured service composition. They propose a model featuring automatic service composition and multidimensional QoS optimization, equipped with a heuristic simulated annealing algorithm. Simulation results are reported to prove the effectiveness and efficiency.

The fifth paper is titled *Measuring the Service Quality of E-commerce and Competitive Strategies*. Chang, Chang, Lin, Yu, Lee, Tsai, Wu, and Yan tackle how to measure and improve e-commerce service quality. They propose a four-dimension gauge to measure the service quality of shopping websites. They also integrate the simultaneous importance-

performance analysis (SIPA) method and analytical Kano model to analyze the market competition strategies.

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Liang-Jie Zhang is Senior Vice President, Chief Scientist, & Director of Research at Kingdee International Software Group Company Limited. Prior to joining Kingdee, he was a Research Staff Member at IBM Thomas J. Watson Research Center. Dr. Zhang has published more than 140 technical papers in journals, book chapters, and conference proceedings. He has 40 granted patents and more than 20 pending patent applications. Dr. Zhang received his Ph.D. on Pattern Recognition and Intelligent Control from Tsinghua University in 1996. He chaired the IEEE Computer Society's Technical Committee on Services Computing from 2003 to 2011. He also chaired the Services Computing Professional Interest Community at IBM Research from 2004 to 2006. Dr. Zhang has served as the Editor-in-Chief of the International Journal of Web Services Research since 2003 and is the founding Editor-in-Chief of IEEE Transactions on Services Computing. He was elected as an IEEE Fellow in 2011, and in the same year won the Technical Achievement Award "for pioneering contributions to Application Design Techniques in Services Computing" from IEEE Computer Society. Dr. Zhang also chaired the 2013 IEEE 2nd International Congress on Big Data (BigData Congress 2013), and the 2009 IEEE International Conference on Cloud Computing (CLOUD 2009).