Preface

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Biographical notes: Patrick C.K. Hung is an Associate Professor at the Faculty of Business and Information Technology in University of Ontario Institute of Technology. He has worked with Boeing Research and Technology on aviation services-related research with a patent on mobile network dynamic workflow system. In addition, he is a Visiting Researcher at the University of Aizu at Fukushima in Japan, a Guest Professor in University of Innsbruck in Austria, and the University of Trento and the University of Milan in Italy. Before that, he was a Research Scientist with the Commonwealth Scientific and Industrial Research Organization in Australia. He is a founding committee member of the IEEE International Conference of Web Services, IEEE International Conference on Services Computing, and IEEE BigData Congress. He is an Associate Editor of the *IEEE Transactions on Services Computing*.

Services account for a major part of the IT industry today. Companies increasingly like to focus on their core expertise area and use IT services to address all their peripheral needs. Services computing is a new science, which aims to study and better understand the foundations of this highly popular industry. It covers the science and technology of leveraging computing and information technology to model, create, operate, and manage business services. Services computing currently shapes the thinking of business modelling, business consulting, solution creation, service delivery, and software architecture design, development and deployment. The global nature of services computing leads to many opportunities and challenges and creates a new networked economic structure for supporting different business models. All the six papers in this issue will have deep research results to report the advance of services computing.

In the first paper, 'Exploit unstructured data using deep analytics to optimise enterprise IT asset management', Herger et al. present an ontology-based semantic information model and semantic reconciliation mediator to extract valid entity information from unstructured data in knowledge format and reconcile them using pattern-based reconciliation.

Next, Jungmann et al. describe an automated approach to modelling service composition and recommendation process by a Markov decision process and reinforcement learning, with a case study serving as proof of concept, in their paper 'Learning service recommendations'.

In the third paper, 'RSenter: terms mining tool from unstructured data sources', Lomotey and Deters present a tool called RSenter that aids the mining of terms from unstructured data storages. The paper discusses the architectural design, the algorithms, and the benefits that distinguish the tool from other existing frameworks.

In the fourth paper, 'Time-sensitive service reconfiguration: a model-based approach', Ramacher and Mönch discuss a time-sensitive service reconfiguration scheme that accounts for a reliable and cost-minimised execution of time-critical service compositions. The results show that an appropriate restriction improves the runtime efficiency of the reconfiguration without decreasing the reliability of the service execution.

In the fifth paper, 'Robust collaborative process interactions under system crash and network failures', Wang et al. discuss all the possible failures caused by system crashes and network failures, and their results make it possible to build robust interactions by using cached-based process transformations.

In the last paper, 'Sales and R&D cooperation and integration in the rapid productisation process', Hänninen et al. report a study on the rapid productisation process of quickly supplementing a company's product or service offering to meet unexpected customer needs. This study shows that a company's performance is associated with the use of rapid productisation.

As a result, all the six papers further depict various directions with different challenges in services computing. We sincerely hope that *IJBPIM* will continue to grow as a successful journal with your contributions in the challenging research area.