
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 is working 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, University of Trento and University of Milan in Italy. Before that, he was a Research Scientist with 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, 'Deriving configurable fragments for process design', Assy et al. present an approach to assist the design phase of business process with configurable process fragments. The authors also present an algorithm for merging process fragments around a particular activity to construct a consolidated fragment. Next, Li et al. present a two-step approach to create a process recommendation process. The authors also estimate the amount of effort that each resource likely spends on handling each service request based on a metadata model and a set of SR handling priority rules in their paper 'Estimating and applying service request effort data in application management services'.

In the third paper, 'Zeus: a distributed triple store for proactive SPARQL queries', Leida and Chu present

an approach for efficient and scalable query processing over RDF graphs which are distributed over a local data grid. The proposed system is based on a distributed architecture with no single point of failure specialised nodes exist. Referring to the fourth paper, 'Analytics-as-a-service framework for terms association mining in unstructured data', Lomotey and Deters discuss a state-of-the-art AaaS framework based on the Bernoulli algorithm to ensure the accurate determination association between terms. The tool is applied to document-oriented data storages where the CouchDB data storage is employed as a test case.

In the fifth paper, 'Exploring the economic value of a cloud computing solution and its contribution to green IT', Nedbal and Stieninger discuss synergistic effects between cloud computing solutions and green IT with a case study in the field of e-invoicing serves as testimonial for a discussion on aspects concerning the economic value and on potentials regarding energy efficiency. In the last paper, 'Efficient filtering processes for machine-to-machine data based on automation modules and data-agnostic algorithms', Papageorgiou et al. present how data filtering processes can be automated as part of an machine-to-machine (M2M) self-configuration framework, and describe a solution that enables the seamless adjustment of domain-specific filtering thresholds in domain-agnostic platforms, based on quality-of-information calculations and M2M-specific data categorisation.

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