Witold Abramowicz, Leszek Maciaszek
Ryszard Kowalczyk, Andreas Speck (Eds.)

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Volume Editors
Witold Abramowicz
Poznan University of Economics, Department of Information Systems,
61-875 Poznan, Poland
Email: Witold@Abramowicz.pl
Leszek Maciaszek
Macquarie University, Department of Computing
Sydney, NSW 2109, Australia
Email: leszek@ics.mq.edu.au
Ryszard Kowalczyk
Swinburne University of Technology, Centre for Information Technology Research
Hawthorn, VIC 3122, Australia
Email: rkowalczyk@it.swin.edu.au
Andreas Speck
Christian-Albrechts-University Kiel, Department of Computer Science
24098 Kiel, Germany
Email: Andreas.Speck@email.uni-kiel.de

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2nd International Conference on Business Process and Services Computing BPSC 2009

Introduction

The papers published in this volume were presented at the 2nd International Conference on Business Process and Services Computing (BPSC 2009) held in Leipzig Germany on 23 – 25 March 2009. The book includes papers selected for presentation in the rigorous review process conducted by the BPSC Program Committee.

The paper selection process considered the mission of BPSC conferences to become a prime international forum to discuss and publish research findings and IT industry experiences with relation to process-centric service-oriented paradigm as it applies to the development and integration of enterprise and e-business information systems. By looking at the business process as a first-class citizen in the IT world and by using the potential of services computing for creation of adaptive process-centric business solutions, BPSC conferences identify most hopeful trends and propose new directions for consideration by researchers and practitioners involved in large-scale software development and integration.

The Business Process Management (BPM) is based on the premise that applications (of business processes) can be evolving independently from process management, very much like they have been evolving independently from data management. The technology of web services and Service Oriented Architecture (SOA) are at the forefront of enabling a desired degree of process independence. The related technology stack includes document management and workflow solutions as well as enterprise integration and e-business interoperability solutions. The related research trends include integration of SOA with Event-Driven Architecture (EDA) and AI-inspired ideas of autonomic computing, multi-agent systems or SWS (Semantic Web Services).

Services within SOA are units of processing logic that collaborate to deliver enterprise logic as a combined effect of business process logic and application control logic. In other words, services apply to both kinds of logic and create a connectivity layer that enables independence of processes and applications. Services can ensure that processes and applications evolve gracefully together (very much like the aspect code and the base code in aspect-oriented programming) and the “crosscutting concerns” are well-documented and tractable. The SOA paradigm redefines the concept of an application as a distributed set of implementation-independent services executing as an orchestrated sequence of messaging and event processing. The confluence of SOA and BPM is resulting in a new process-centric paradigm that holds great promise for enterprise and B2B computing.

Moreover, one of the major BPM tasks is the constant need to adapt implemented processes to the changing business needs. As the degree of automation in BPM is currently rather limited, a great potential lies in the attempts to automate BPM a little further by the use of Semantic Web services and technologies. Founded on ontologies, Semantic Web provides methods and tools for the machine-understandable representation of collective knowledge and business processes in which such knowledge resides. Semantic Web Services (SWS) make use of Semantic Web technology to support the automated discovery, substitution, composition, and execution of SOA-based applications. Semantic Web goes as far as expecting that intelligent software agents can use semantic descriptions of Web services and resources to automate their use to accomplish user goals. Current research shows that combining the worlds of BPM and SWS may be very fruitful.

Acknowledgements

Our gratitude goes first of all to the Organizing Committee of BPSC 2009 – Karol Wieloch of Poznan University of Economics, Poland and Martin Matzner of University of Leipzig, Germany. Between two of them, they have taken care of coordinating the work of PC members, communicating with the authors, enabling electronic paper submissions and consequent reviewing tasks, registering of participants, as well as formatting this volume for publication.

The most responsible work was of course placed on the PC members who had to decide which papers were worthy of presentation at the conferences. We would like to thank them for marvelous work done.

Leszek Maciaszek
BPSC 2009 General Chair

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The reviewing process was carried out by the BPSC 2009 Program Committee members. The final decision of acceptance/rejection was strictly based on the reviews. The PC members who contributed reviews were:

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The International Workshop on Intelligent Service Management ISM 2009

Introduction

The papers published in this volume were presented at the International Workshop on Intelligent Service Management 2009 (ISM 2009) held in Leipzig, Germany on 24 March 2009. The book includes papers selected for presentation in the rigorous review process conducted by the ISM Program Committee.

Service-oriented computing has emerged as the most promising design paradigm for distributed information systems. The vision of service-oriented computing is to capture business relevant functionalities of existing software systems as services and use service composition to form composite applications. While this vision has yet to be achieved in practise, in particular the application of intelligent systems and techniques promises significant advancements for an adaptive and reliable construction and management of service-oriented applications and systems.

The ISM 2009 workshop provided an international forum for presenting and discussing recent significant developments and practical results at the intersection of service-oriented computing and intelligent systems and technologies and promoted cross-fertilization of ideas and techniques between these fields. The workshop encouraged a multidisciplinary perspective and aimed at bringing together researchers from diverse fields and interests, including multi-agent systems and artificial intelligence, automated construction and management of service-oriented applications/composite services, intelligent management of service quality concerns, and adaptive and reliable evolution and optimization of services.

The papers published in this book were accepted for publication at the ISM 2009 workshop as a result of a thorough peer review process. All submitted papers were reviewed by at least three members of the international ISM Program Committee and assessed by the conference chairs. The final decision of acceptance/rejection was strictly based on the reviews of the Program Committee members.

We would like to thank all members of the international Program Committee for their excellent work, effort, and support in ensuring the high-quality program and successful outcomes of the ISM 2009 workshop. Our thanks go also to the German Computer Society (Gesellschaft für Informatik) for their cooperation and help in putting this volume together.

Ryszard Kowalczyk and André Ludwig
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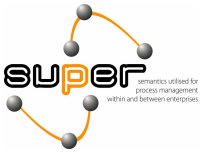

The Young Researchers Workshop on Modeling and Management of Business Processes YRW-MBP 2009

Management and Modeling of Business Processes is among the most important, but also most complex problems of modern computer science. The rise in electronic business also leads to a major, industry-driven request for appropriate support in defining and maintaining business process execution engines. Additionally, the new paradigms of service-oriented architectures (SOA) and extensible service definitions (e.g. Web Services) require a thorough re-engineering on the existing approaches in Business Process Modeling.

The Young Researchers Workshop Series on Modeling and Management of Business Processes aims at providing a platform for young researchers to present their work in this particular area. The workshop is intended to serve as a forum for the participants to get in contact with other researchers in the field and to become familiar with other approaches and future research topics.

We would like to express our thanks to all authors who submitted their papers and provided a presentation at the workshop. Further, we want to thank our reviewers and on-site moderators for their outstanding efforts and support. Though two pages per paper are not supposed to completely cover the author's full contributions, we think the high quality of the resulting proceedings illustrates the importance and necessity of discussion on this hot research topic.

March 2009,

Andreas Speck
Sven Feja
Meiko Jensen

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