Bernd J. Krämer
Kwei-Jay Lin
Priya Narasimhan (Eds.)

Service-Oriented Computing – ICSOC 2007

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Bernd J. Krämer Kwei-Jay Lin
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Volume Editors

Bernd J. Krämer
FernUniversität Hagen
D-58084 Hagen, Germany
E-mail: Bernd.Kraemer@FernUni-Hagen.de

Kwei-Jay Lin
University of California
Irvine, California 92697-2625, USA
E-mail: klin@ece.uci.edu

Priya Narasimhan
Carnegie Mellon University
Pittsburgh PA 15213, USA
E-mail: priya@cs.cmu.edu

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Preface

This volume contains all of the Research-Track, Industry-Track and Demo-Track papers that were selected for presentation at the Fifth International Conference on Service-Oriented Computing (ICSOC 2007), which was held in Vienna, Austria, September 17–20, 2007.

ICSOC 2007 followed the footsteps of four previous successful editions of the International Conference on Service-Oriented Computing that were held in Chicago, USA (2006), Amsterdam, The Netherlands (2005), New York City, USA (2004) and Trento, Italy (2003). ICSOC is recognized as the flagship conference for service-oriented computing research and best practices. ICSOC covers the entire spectrum from theoretical and foundational results to empirical evaluation, as well as practical and industrial experiences. ICSOC 2007 continued this tradition while introducing several new themes to further these goals.

Service-oriented computing brings together ideas and technologies from many diverse fields in an evolutionary manner in order to address research challenges including service-based application modeling, service composition, discovery, integration, monitoring and management of services, service quality and security, methodologies for supporting service development, grid services, and novel topics including information as a service and service-oriented architecture (SOA) governance.

To provide a balanced coverage and an equal emphasis across all aspects of service-oriented computing, ICSOC 2007's topics were divided into seven major areas: Business Service Modeling, Service Assembly, and Service Management, addressing research issues and best practices in the primary life-cycle phases of a service, modeling, assembly, deployment, and management; SOA Runtime and Quality of Service, covering issues spanning all stages of the life-cycle; Grid Services and Service Architectures, combining grid infrastructure concepts with service-oriented computing; and Business and Economical Aspects of Services.

Our solicitation of Industrial- and Research-Track submissions was extremely aggressive, particularly given the short time span between ICSOC 2006 (in December 2006) and ICSOC 2007 (in September 2007). The Research Track's paper-selection process was stringent, given the large number of excellent submissions that we had to select from in a very short time. In addition, matching the diversity of paper topics and reviewer expertise was a challenge, considering the multi-discplinary and emergent nature of service-oriented computing research. We worked closely with and consulted the designated Area Coordinators, with two experts leading the review process for each of the areas, for reviewer selection and also for resolution in the case of papers with conflicting reviews. In the paper-selection process, the quality of the submission was the ultimate deciding factor. We also strived to achieve a balance across all of the areas that encompass

service-oriented computing. Of the 139 submissions to the ICSOC 2007 Research Track, only 30 full papers and 14 short papers were accepted for the program.

Our Industrial Track focused on three topic areas: Information as a Service, SOA Governance, and SOA Runtime and Registries. Each of these topic areas was covered on separate days. Each conference day started with a review of the state of the art, followed by a panel discussion reviewing key issues, both technical and practical, that were relevant to that area. The panel discussion was followed by a presentation of the accepted Industrial-Track papers in the form of multiple sessions throughout the day. The Industrial Track specifically solicited submissions covering the state of practice and real-world experience in service-oriented computing, especially in the three focused topic areas. Of particular interest were papers that described innovative service-based implementations, novel applications of service-oriented technology, and insights and improvements to the state of practice along with case studies and lessons learned from practitioners that emphasized applications, service technology, system deployment, organizational ramifications, or business impact. Of the 28 submissions to the ICSOC 2007 Industrial Track, only 13 full papers were accepted for the program.

In addition to the Research and Industry Tracks, ICSOC 2007 featured top-notch keynotes, presented by influential and recognized leaders in the industrial and academic community. The program included five tutorials and hands-on sessions on SOA, BPEL, Monitoring and Testing, Non-functional Properties, and Web APIs on Rails that were developed and presented by renowned researchers and practitioners. Also featured in the program were three panels addressing innovative issues like Information as a Service, SOA Governance, and Registries and SOA Runtime. Five pre-conference workshops on Engineering Service-Oriented Applications, Business-Oriented Aspects concerning Semantics and Methodologies in Service-oriented Computing, Non-functional Properties and Service-Level Agreements in Service-Oriented Computing, Web APIs and Services Mashups, and Telecom Service-Oriented Architectures completed the attractive conference program.

This outstanding conference program was a testament to the efforts of many dedicated individuals who were committed to the success of ICSOC 2007.

We start by acknowledging the Area Coordinators, the Program Committee members, and the reviewers for their painstaking efforts and integrity in the review and paper-selection process, especially given the pressures of time. We also acknowledge the significant contributions of Eva Nedoma and Uwe Zdun in the local organization; Karl Goeschka for handling finances; Soila Pertet and Alexander Stuckenholz for handling publicity-related activities. We also thank the Workshop Chairs, Elisabetta Di Nitto and Matei Ripeanu; the Demo Chairs, Martin Bichler and Ming-Chien Shan; Tutorial Chair, Marco Aiello; the Panel Chairs, Klaus Pohl and Robert D. Johnson; the Ph D ssSymposium Chairs, Tudor Dumitras, Andreas Hanemann and Benedikt Kratz. We would also like to single out individuals for their special help and contributions: Renate Zielinski and Volker Winkler for assisting the Program Chairs in compiling the proceed-

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ings, Harald Weinreich, who set up and adapted Conftool for our use and who was extremely responsive throughout.

We would like to express our deep gratitude to the Steering Committee members: Fabio Casati, Paco Curbera, Mike Papazoglou and Paolo Traverso for their constant guidance. Finally, we would like to acknowledge the cooperation of Springer, the ACM Special Interest Group on Hypertext, Hypermedia and the Web (SIGWeb), the ACM Special Interest Group on Software Engineering (SIGSoft) and the Networked European Software and Services Initiative (NESSI).

Finally, we thank the authors of our accepted papers for submitting their work to ICSOC 2007. Without the high-quality work of these researchers and practitioners, and their efforts in the area of service-oriented computing, such an excellent conference program would not have been possible.

It was our privilege and pleasure to compile this outstanding ICSOC 2007 conference proceedings. We sincerely hope that you find the papers in this volume as interesting and stimulating as we did.

July 2007

Asit Dan
Schahram Dustdar
Bernd Krämer
Kwei-Jay Lin
Priya Narasimhan
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