

Contents

Engineering Service-Oriented Applications

- From Choreography Diagrams to RESTful Interactions 3
Adriatik Nikaj, Sankalita Mandal, Cesare Pautasso, and Mathias Weske
- Estimating the Complexity of Software Services Using an Entropy
Based Metric 15
George Feuerlicht and David Hartman
- Establishing Distributed Governance Infrastructures for Enacting
Cross-Organization Collaborations. 24
Alex Norton
- All the Services Large and Micro: Revisiting Industrial Practice
in Services Computing. 36
Gerald Schermann, Jürgen Cito, and Philipp Leitner
- Distributed Service Co-evolution Based on Domain Objects 48
*Martina De Sanctis, Kurt Geihs, Antonio Bucchiarone,
Giuseppe Valetto, Annapaola Marconi, and Marco Pistore*
- A Web Services Infrastructure for the Management of *Mashup* Interfaces . . . 64
*Jesús Vallecillos, Javier Criado, Antonio Jesús Fernández-García,
Nicolás Padilla, and Luis Iribarne*

Resource Management in Service-Oriented Computing

- S-PDH: A CPS Service Contract Framework for Composition 79
Lin Ye, Kaiyu Qian, and Liang Zhang
- Towards RAM-Based Variant Generation of Business Process Models. 91
Ahmed Tealeb, Ahmed Awad, and Galal Galal-Edeen
- Extending Generic BPM with Computer Vision Capabilities. 103
Adrian Mos, Adrien Gaidon, and Eleonora Vig

Engineering for Service-Oriented Enterprise

- Extraction of Topic Map Ontology for Web Service-Oriented Enterprises. . . . 117
*Suman Roy, Kiran Prakash Sawant, Aditya Kale,
and Olivier Maurice Charvin*

Case Study Method and Research Design for the Dynamic Multilevel Component Selection Problem	130
<i>Andreea Vescan</i>	

Formal Modeling and Verification of Service-Based Systems

Expressive Equivalence and Succinctness of Parametrized Automata with Respect to Finite Memory Automata	145
<i>Tushant Jha, Walid Belkhir, Yannick Chevalier, and Michael Rusinowitch</i>	
Toward the Formalization of BPEL	157
<i>Laila Boumlik and Mohamed Mejri</i>	

Intelligent Service Clouds

Context-Aware Personalization for Smart Mobile Cloud Services	171
<i>Waldemar Hummer and Stefan Schulte</i>	
Information Governance Requirements for Architectural Solutions Supporting Dynamic Business Networking	184
<i>Mohammad R. Rasouli, Rik Eshuis, Jos J.M. Trienekens, and Paul W.P.J. Grefen</i>	

Big Data Services and Computational Intelligence

An Evolutionary Multiobjective Approach for the Dynamic Multilevel Component Selection Problem	193
<i>Andreea Vescan</i>	

Dependability Issues in Services Computing

A Reusable Architecture for Dependability and Performance Benchmarking of Cloud Services	207
<i>Amit Sangroya and Sara Bouchenak</i>	
Safe Configurations of Replica Voting Processes in Fault-Resilient Data Collection Services	219
<i>Kaliappa Ravindran and Arun Adiththan</i>	
On Composition of Checkpoint and Recovery Protocols for Distributed Systems	231
<i>Soumi Chattopadhyay, Ansuman Banerjee, and Himadri Sekhar Paul</i>	

A Proactive Solution to Manage Web Service Unavailability in Service
Oriented Software Systems. 243
*Navinderjit Kaur Kahlon, Salil Vishnu Kapur, Kuljit Kaur Chahal,
and Sukhleen Bindra Narang*

Author Index 255