# Table of Contents

## Session FS-1: Service Composition

*A Browser-based Framework for Data Cache in Web-Delivered Service Composition*
Jiyu Huang, Xuanzhe Liu, Qi Zhao, Jianzhu Ma, Gang Huang

Combining Horizontal and Vertical Composition of Services
Ralph Metzner, Christoph Fehling, Dimka Karastoyanova, Frank Leymann

Sequential Composition of Multi-Party Choreographies
Andreas Schönberger, Guido Wirtz

## Session FS-2: Quality of Service

QoS Probability Distribution Estimation for Web Services and Service Compositions
Huiyuan Zheng, Jian Yang, Weiliang Zhao

Handling Asynchronous Data in Assessing QoS over Multiple Attributes
Hmood Al-Dossari, Jianhua Shao, Alun Preece

Towards Adaptive Web Services QoS Prediction
Jing Li, Yongwang Zhao, Jiawen Ren, Hailong Sun, Chunyang Hu, Dianfu Ma

## Session FS-3: Cloud Services

Robust Cloud Resource Provisioning for Cloud Computing Environments
Sivadon Chaisiri, Bu-Sung Lee, Dusit Niyato

Supporting Accountable Business to Business Document Exchange in the Cloud
Derek John Mortimer, Nick Cook

Image Selection as a Service for Cloud Computing Environments
Robert Filepp, Larisa Shwartz, Christopher Ward, Robert D Kearney, Karen Cheng, Christopher C Young, Yanal Ghosheh

## Session FS-4: Data Management

Towards a Data Access Framework for Service-Oriented Rich Clients
Qi Zhao, Xuanzhe Liu, Chen Xingrun, Jiyu Huang

Energy-Aware Reliability-Oriented Scheme to Deliver Time-Sensitive Data in Sensor Networks
Khaled Daabaj

Automatic tagging based on Linked Data
Martin Dostal, Karel Jezek

## Session FS-5: Business Process

Compliance Scopes: Extending the BPMN 2.0 Meta Model to Specify Compliance Requirements
Daniel Schleicher, Frank Leymann, David Schumm, Monika Weidmann

Change Impact Analysis for Service Based Business Processes
Yi Wang, Jian Yang, Weiliang Zhao
Exploiting Multicores to Optimize Business Process Execution
Achille Peternier, Daniele Bonetta, Cesare Pautasso, Walter Binder

Session FS-6: Semantic Web

The RDFS Mapping for Recursive Relationship of Relational Data Model
Michelle Miyoung Choi, Chang Joo Moon, Doo Kwon Baik

A Semantic Web Enabled Form Model and RESTful Service Implementation
Armin Haller, Florian Rosenberg

Session FS-7: Services Systems

An Effective Emergency Escape System with Service-Oriented Architecture in a Double-Layered MANET
JaeSuk Lee, Sung-Bong Yang

Ontology-Based Service-Oriented Architecture for Emergency Management in Mass Gatherings
Pari Delir Haghighi, Frada Burstein, Hasn Al Tair, Paul Arbon, Shonali Krishnaswamy

Quality of IT Service Delivery - Analysis and Framework for Human Error Prevention
Larisa Shwartz, Daniele Rosu, David Loewenstern, Shang Guo, Melissa J. Buco, Rafael Lavrado,
Manish Gupta, Pradipta De, Jai Singh, Venkateswara Madduri

Session FS-8: Services Management

WS-Gesture, a Gesture-based State-aware Control Framework
Gregory Van Seghbroeck, Stijn Verstichel, Filip De Turck, Bart Dhoedt

Weighted Fuzzy Clustering for Capability-driven Service Aggregation
Christoph Dorn, Schahram Dustdar

Towards Information Transparency in the Context of Service Management
Roman Belter, Thorsten Spies, Andre Ludwig, Bogdan Franczyk, Stefan Eicker

Session FS-9: Service Applications

A Self-Service Portal for Service-Based Applications
Ralph Mietzner, Frank Leymann

Virtualised e-Learning with Real-Time Guarantees on the IRMOS Platform
Tommaso Cucinotta, Fabio Checconi, George Kousiouris, Dimosthenis Kyriazis, Theodora Varvarigou,
Alessandro Mazzetti, Zlatko Zlatev, Jury Papay, Mike Boniface, Soeren Berger, Dominik Lamp, Thomas
Voith, Manuel Stein

Chinese Question Classification in Community Question Answering
Yunqi Lei, Yiyuan Jiang

Session FS-10: Performance

An Approach for Describing Heterogeneous Web Resources in a Unified Schema
Ran Tang, Ying Zou

Estimating Real-Time Service Process Response Time using Server Utilizations
Weiran Nie, Jing Zhang, Kwei-Jay Lin

Cost-Benefit Analysis of High Performance Computing Infrastructures
Amril Nazir, Seren-Aksel Sørensen

Session FS-11: Services Evolution
Session FS-12: Ontology

OIC: Ontology-based Intelligent Customization Framework for SaaS
Wei-Tek Tsai, Shao Qihong, Wu Li

LifeEvent Ontology Oriented E-government Service Integration
Farzad Sanati, Jie Lu

Ontology-driven Query Expansion Methods to Facilitate Federated Queries
Neda Alipanah, Pallabi Parveen, Sheetal Menezes, Latifur Khan, Steven B. Seida, Bhavani Thuraisingham

Session SS-1: Service-Oriented System Engineering

Service-oriented business to business integration: a systematic literature analysis
Ilkka Melleri, Kari Hlekkanen, Juha Mykkanen

Technical Issues and Lessons Learned in Developing Service-based Mobile Applications
Hyun Jung La, Hyun Min Lee, Ho Joong Lee, Soo Dong Kim

Facing Service-Oriented System Engineering Challenges: An Organizational Perspective
Zheng Li, He Zhang, Liam O'Brien

SMART: A Platform for Developing and Managing Service-Based Mobile Applications
Du Wan Cheun, Hyun Jung La, Sang Hun Oh, Soo Dong Kim

Session SS-2: SOA

Supporting the Evolution of Model-Driven Service-Oriented Systems: A Case Study on QoS-aware Process-Driven SOAs
Ernst Oberortner, Uwe Zdun, Schahram Dustdar, Agnieszka Betkowska Cavalcante, Marek Tluczek

e-Service Innovation Provided by Local e-Government in China: A Case Study
Renae Agrey, Dongming Xu

The IT Implicated Within The Enterprise Architecture Model Analysis of Architecture Models and Focus IT Architecture Domain
Igor Aguilar Alonso, José Carrillo Verdun, Edmund Tovar Caro

Towards a Diamond SOA Operational Model
Mohammed AbuJarour, Felix Naumann

Session SS-3: Services Discovery

A Collaborative Approach for Identifying Privacy Disclosure in Web Based Services
Feng Gao, Jingsha He and Shunan Ma

An Approach to Identify Candidate Services for Semantic Web Service Discovery
Gopinath Ganapathy, Chellammal Suriyanarayanan

Discovery and Selection of Web Services Fragments for Re-Composition
Chahrazed Bouhini, Freddy Lecue, Nikolay Mehandjiev, Olivier Boissier

SRC: A Service Registry on Cloud Providing Behavior-aware and QoS-aware Service Discovery
Hao-peng Chen, Shao-chong Li

Session SS-4: Services Applications

Architecture for transparent helpdesk system with multimodal presence
Leonel Morgado, Tiago Ribeiro, Pedro Mestre, Carlos Serôdio, Paulo Reis, Fausto Carvalho

Architectural Patterns for Service-based Mobile Applications
Jennifer Kim

A Service Oriented Monitoring Framework for soft real-time applications
Gregory Katsaros, George Kousiouris, Spyridon V. Gogouvitis, Dimosthenis Kyriazis, Theodora Varvarigou

Life-cycle Monitoring Scheme of Malware Download Sites for Websites
Takeshi Yagi, Naoto Tanimoto, Takeo Hariu, Mitsutaka Itoh

Session SS-5: Services Management

A Behaviour-Based Trust Model for Service Web
Surya Nepal, Wanita Sherchan, Athman Bouguettaya

Service-oriented Data Quality Engineering and Data Publishing in the Cloud
Marco Comerio, Hong-Linh Truong, Carlo Batini, Schahram Dustdar

Ensuring Conformance in an Evolving Choreography
Marcel Hiel, Huib Aldewereld, Frank Dignum

Session SS-6: Service Systems

An Operational Semantics of WS-BPEL based on Abstract BPEL Machine
Sun Dou, Yongwang Zhao, Zeng Hao, Dianfu Ma

A Metric for Measuring the Degree of Entity-Centric Service Cohesion

Using WordMap and Score-based Weight in Opinion mining with MapReduce
Kyung Soo Cho, Na Rae Jung, Ung Mo Kim

Web Services Challenge

WSC-2010: Web Services Composition and Evaluation
M. Brian Blake, Thomas Weise, Steffen Bleul

An Accumulated-QoS-First Search Approach for Semantic Web Service Composition
Luo Sen, Bin Xu, Yixin Yan

QoS-Aware Semantic Web Service Composition for SOAs
Xin Yu, Thomas Weise, Ke Tang, Steffen Bleul

Concept mapping for faster QoS-Aware Web Service Composition
Viktoriya Degeler, Ilce Georgievski, Alexander Lazovik, Marco Aiello

Two-Phase Graph Search Algorithm for QoS-Aware Automatic Service Composition
Huanyu Ma, Wei Jiang, Songlin Hu, Zhenqiu Huang, Zhiyong Liu