

ICSOC 2013 Workshops
Monday, 2 December 2013

9:00 – 10:30	PASCEB P1 (Verdi)	WESOA W1 (Donizetti 1)	CSB CS1 (Donizetti 2)		PhD Symp Ph1 (Rossini)
10:30 – 11:00	Coffee Break				
11:00 – 12:30	PASCEB P2 (Verdi)	WESOA W2 (Donizetti 1)	CSB CS2 (Donizetti 2)		PhD Symp Ph2 (Rossini)
12:30 – 13:30	Lunch				
13:30 – 15:00	PASCEB P3 (Verdi)	WESOA W3 (Donizetti 1)	CCSA CC1 (Donizetti 2)	SWESE S1 (Puccini 2)	PhD Symp Ph3 (Rossini)
15:00 – 15:30	Coffee Break				
15:30 – 17:00	PASCEB P4 (Verdi)	WESOA W4 (Donizetti 1)	CCSA CC2 (Donizetti 2)	SWESE S2 (Puccini 2)	
17:00 – 17:30					
17:30 – 18:00					

19:00 Conference Reception

The 1st Workshop on Pervasive Analytical Service Clouds for the Enterprise and Beyond (PASCEB 2013) (Verdi)

Chairs: Paolo Bellavista (Univ. di Bologna, Italy)
Claudia-Melania Chituc (Eindhoven Univ. of Tech. Netherlands)
Yu Deng (IBM TJ Watson, USA)
Klaus Marius Hansen (Univ. of Copenhagen, Denmark)
Lam-Son Lê (Univ. of Wollongong, Australia)
Alex Norta (Independent Researcher, Finland)
Hong-Linh Truong (Vienna Univ. of Tech., Austria)
Roman Vaculín (IBM TJ Watson, USA)
Liangzhao Zeng (IBM TJ Watson, USA)
Weishan Zhang (China Univ. of Petroleum, China)
JieHan Zhou (Univ. of Oulu, Finland)

9:00 – 10:30

Session P1: SCEB

Enabling Semantic Complex Event Processing in the Domain of Logistics

T. Metzke, A. Rogge-Solti, A. Baumgrass, J. Mendling, and M. Weske

Towards Self-Adaptation Planning for Complex Service-based Systems

A. Ismail and V. Cardellini

Towards an Integration Platform for Bioinformatics Services

G. Llambías, L. González, and R. Ruggia

10:30 – 11:00 Coffee Break

11:00 – 12:30

Session P2: PAASC & SCEB Keynote

(PAASC) Model-driven Event Query Generation for Business Process Monitoring

M. Backmann, A. Baumgrass, N. Herzberg, A. Meyer, and M. Weske

(SCEB Keynote) From Traditional Cloud Computing to Elastic Computing

Schahram Dustdar

12:30 – 13:30 Lunch

13:30 – 15:00

Session P3: ASC & SeMaPS

(ASC) An Optimized Strategy for Data Service Response with Template-Based Caching and Compression

Z. Peng, X. Kefu, L. Yan, and G. Li

(ASC) Towards a Formal Model for Cloud Computing

Z. Benzadri, F. Belala, and C. Bouanaka

(SeMaPS) Towards Structure-Based Quality Awareness in Software Ecosystem Use
K.M. Hansen and W. Zhang

15:00 – 15:30 Coffee Break

15:30 – 18:00

Session P4: SeMaPS

Hybrid Emotion Recognition Using Semantic Similarity

Z. Zhang, X. Meng, P. Zhang, W. Zhang, and Q. Lu

Dynamic Adaptation of Business Process Based on Context Changes: A Rule-Oriented Approach

G. Hu, B. Wu, and J. Chen

Component Migration in an OSGi based Pervasive Cloud Infrastructure

W. Zhang, L. Chen, Q. Lu, P. Zhang, and S. Yang

An Adaptive Enterprise Service Bus Infrastructure for Service Based Systems

L. González, J.L. Laborde, M. Galnares, M. Fenoglio, and R. Ruggia

Requirements to Pervasive System Continuous Deployment

C. Escoffier, O. Günalp, and P. Lalanda

The 9th International Workshop on Engineering Service-Oriented Applications (WESOA 2013) (Donizetti 1)

Chairs: George Feuerlicht (UTS, Australia & Prague Univ. of Economics, Czech Republic)
Winfried Lamersdorf (Univ. of Hamburg, Germany)
Guadalupe Ortiz (Univ. of Cádiz, Spain)
Christian Zirpins (SEEBURGER AG Research, Germany)

9:00 – 10:30

Session W1: Welcome and Keynote

10:30 – 11:00 Coffee Break

11:00 – 12:30

Session W2: Business Processes and I.T Services Management

From Process Models to Business Process Architectures: Connecting the Layers

Rami-Habib Eid-Sabbagh and *Mathias Weske* (Univ. of Potsdam, Germany)

Integrating Service Release Management with Service Solutioning Processes

Heiko Ludwig, Juan Cappi, Valeria Becker, Bairbre Stewart, and Susan Meade (IBM, USA)

Practical Compiler-based User Support during the Development of Business Processes

Thomas Martin Prinz and *Wolfram Amme* (Friedrich Schiller Univ. Jena, Germany)

12:30 – 13:30 Lunch

13:30 – 15:00

Session W3: Automating Process Discovery, Composition and Event Sources Detection

Towards Automating the Detection of Event Sources

Nico Herzberg, Oleh Khovalko, Anne Baumgrass, and Mathias Weske
(Univ. of Potsdam, Germany)

Discovering Pattern-Based Mediator Services from Communication Logs

Christian Gierds (Humboldt-Univ. zu Berlin, Germany) and

Fahland Dirk (Tech. Univ. of Eindhoven, Netherlands)

Goal-driven Composition of Business Process Models

Benjamin Nagel, Christian Gerth, and Gregor Engels (Univ. of Paderborn, Germany)

15:00 – 15:30 Coffee Break

15:30 – 17:30

Session W4: Modelling Service-Oriented and Adaptive Systems

Model Checking GSM-Based Multi-Agent Systems

Pavel Gonzalez (Imperial College London, UK), *Andreas Griesmayer* (ARM, Cambridge), and
Alessio Lomuscio (Imperial College London, UK)

Towards Modelling and Execution of Collective Adaptive Systems

Vasilios Andrikopoulos (Univ. of Stuttgart, Germany), *Antonio Bucchiarone* (Fondazione Bruno Kessler, Italy), *Santiago Gomez Saez* (Univ. of Stuttgart, Germany), *Dimka Karastoyanova* (Univ. of Stuttgart, Germany), and *Claudio Antares Mezzina* (Fondazione Bruno Kessler, Italy)

A Requirements-based Model for Effort Estimation in Service-oriented Systems

Bertrand Verlaine, *Ivan J. Jureta*, and *Stéphane Faulkner* (Univ. of Namur, Belgium)

Augmenting Complex Problem Solving with Hybrid Compute Units

Hong-Linh Truong (Vienna Univ. of Tech., Austria), *Khanh-Hoa Dam* (Univ. of Wollongong, Australia), *Adytia Ghose* (Univ. of Wollongong, Australia), and *Schahram Dustdar* (Vienna Univ. of Tech., Austria)

Workshop summary

The 1st International Workshop on Cloud Service Brokerage (CSB 2013)

(Donizetti 2)

Chairs: Gregoris Mentzas (National Technical Univ. of Athens, Greece)

Anthony J. H. Simons (Univ. of Sheffield, UK)

Iraklis Paraskakis (South-East European Research Centre, Thessaloniki, Greece)

9:00 – 10:30

Session CS1: Towards Cloud Service Brokerage

Chair: Anthony J. H. Simons (Univ. of Sheffield, UK)

A Comparison Framework and Review of Service Brokerage Solutions for Cloud Architectures

Frank Fowley (Dublin City Univ., Ireland), *Claus Pahl* (Dublin City Univ., Ireland), and

Li Zhang (Northwestern Univ., China)

Brokerage for Quality Assurance and Optimisation of Cloud Services: an Analysis of Key Requirements

Dimitrios Kourtesis (SEERC/Univ. of Sheffield, Greece), *Konstantinos Bratanis* (SEERC/Univ. of

Sheffield, Greece), *Andreas Friesen* (SAP Research, Germany), *Yiannis Verginadis* (National Tech.

Univ., Greece), *Anthony J H Simons* (Univ. of Sheffield), *Alessandro Rossini* (SINTEF, Norway),

Antonia Schwichtenberg (CAS Software AG, Germany), and *Panagiotis Gouvas* (Singular Logic SA, Greece)

Towards Value Driven Business Modeling based on Service Brokerage

Yucong Duan (Hunan Univ., China), *Keman Huang* (Tsinghua Univ., China),

Ajay Kattepur (INRIA Paris-Rocquencourt, France), and *Wencai Du* (Hainan Univ., China)

10:30 – 11:00 Coffee Break

11:00 – 12:30

Session CS2: Mechanisms in Cloud Service Brokerage

Chair: Iraklis Paraskakis (South-East European Research Centre, Greece)

Introducing Governance and Failure Prevention Capabilities in Cloud Service Brokers:

Challenges Ahead

Konstantinos Bratanis and *Dimitrios Kourtesis* (SEERC/Univ. of Sheffield, Greece)

Model-Based Testing in Cloud Brokerage Scenarios

Mariam Kiran (Univ. of Sheffield, UK), *Andreas Friesen* (SAP AG, Germany),

Anthony J H Simons (Univ. of Sheffield, UK), and *Wolfgang K R Schwach* (SAP AG, Germany)

Value Added Modelling and Analysis on Service Value Brokerage

Yucong Duan (Hunan Univ., China), *Yongzhi Wang* (Florida Int. Univ., USA),

Jinpeng Wei (Florida Int. Univ., USA), *Ajay Kattepur* (INRIA Paris-Rocquencourt, France), and

Wencai Du (Hainan Univ., China)

The 3rd International Workshop on Cloud Computing and Scientific Applications (CCSA 2013) (Donizetti 2)

Chairs: Suraj Pandey (IBM Research, Australia)
Surya Nepal (CSIRO ICT Center, Australia)

13:30 – 15:00

Session CC1

Opening and Keynote

Planning and Scheduling Data Processing Workflows in the Cloud with Quality-of-Data Constraints

Sérgio Esteves and Luís Veiga

A Light-Weight PaaS Cloud Framework for Scientific Applications

Kewei Duan, Julian Padget, and H. Alicia Kim

Galaxy + Hadoop: Toward a Collaborative and Scalable Image Processing Toolbox in Cloud

Shiping Chen and Tomasz Bednarz

15:00 – 15:30 Coffee Break

15:30 – 17:00

Session CC2

Are Public Clouds Elastic Enough for Scientific Computing?

Guilherme Galante, Luis Carlos Erpen De Bona, Antonio R. Mury, and Bruno Schulze

Energy Savings on a Cloud-based Opportunistic Infrastructure

Johnatan Pecero, Cesar O. Diaz, Harold Castro, Mario Villamizar, German Sotelo, and Pascal Bouvry

SciLightning: a Cloud Provenance-based Event Notification for Parallel Workflows

Julliano Pintas, Daniel de Oliveira, Kary Ocaña, Eduardo Ogasawara, and Marta Mattoso

SLA-Aware Load Balancing in a Web-Based Cloud System over OpenStack

Jordi Vilaplana and Francesc Solsona

Closing, Award, Journal Special Issue, and CCSA2014

Chair

The 9th International Workshop on Semantic Web Enabled Software Engineering (SWESE 2013) (Puccini 2)

Chairs: Jeff Z. Pan (Univ. of Aberdeen, UK)
Elisa F. Kendall (Thematrix Partners LLC , USA)
Ljiljana Stojanovic (FZI, Germany)
Yuting Zhao (Univ. of Aberdeen, UK)
Gerd Groener (Univ. of Duisburg-Essen, Germany)

13:30 – 15:00

Session S1

Opening and Keynote

Fluent Calculus-based Semantic Web Service Composition and Verification using WSSL

George Baryannis and Dimitris Plexousakis

Management of Variability in Modular Ontology Development

Melanie Langermeier, Peter Rosina, Heiner Oberkampff, Thomas Driessen, and Bernhard Bauer

15:00 – 15:30 Coffee Break and Poster

15:30 – 17:30

Session S2

Re-engineering the ISO 15926 Data Model: A Multi-Level Metamodel Perspective

Andreas Jordan, Wolfgang Mayer, Markus Stumptner, Georg Grossmann, Sandeep Donthi, and Ankur Kumar

Template-based Ontology Population for Smart Environments Configuration

Sebastián Aced López, Dario Bonino, and Fulvio Corno

A Novel Semantic Approach for Web Service Discovery using Computational Linguistics Techniques

Asma Adala, Tabbane Nabil, and Sami Tabbane

OntoMaven -- Maven-based Ontology Development and Management of Distributed Ontology Repositories

Adrian Paschke

Towards Automated Service Matchmaking and Planning for Multi-Agent Systems with OWL-S -- Approach and Challenges

Fähndrich Johannes, Nils Masuch, and Hilmi Yildirim

Semantic Jira -- Semantic Expert Finder in the Bug Tracking Tool Jira

Velten Heyn and Adrian Paschke

PhD Symposium (Rossini)

Chairs: Boualem Benatallah (Univ. of New South Wales, Australia)
Ivona Brandi (Vienna Univ. of Technology, Austria)
Fabio Patrizi (Sapienza Univ. of Rome, Italy)

9:15 – 9:30 Introduction

9:30 – 10:30

Session Ph1: Data Management & Big Data

Chair: Fabio Patrizi (Sapienza Univ. of Rome, Italy)

Towards the Automated Synthesis of Data Dependent Service Controllers

Franziska Bathelt-Tok

An information-centric system for building the Web of Things

Stefano Turchi

10:30 – 11:00 Coffee Break

11:00 – 12:30

Session Ph2: Engineering and Testing the SOA, SLA Management

Chair: Boualem Benatallah (Univ. of New South Wales, Australia)

A Context-Aware Access Control Framework for Software Services

A. S. M. Kayes

Testing of distributed service-oriented systems

Faris Nizamic

Automation of SLA Life-cycle in Cloud Computing

Waheed Aslam Ghumman

13:30 – 15:00

Session Ph3: Workflow

Chair: Fabio Patrizi (Sapienza University of Rome, Italy)

Multi-Agent Approach for Managing Workflows in an Inter-Cloud Environment

Sofiane Bendoukha

A Novel Approach towards a Dynamic Declarative Service Workflow Reference Model

Clarke Damian

Description and composition of services towards the Web-Telecom convergence

Terence Ambra

ICSOC 2013
Tuesday, 3 December 2013 (Day 1 of 3)

8:45 – 10:00	Session 1: Welcome and Keynote Richard Hull Data-centricity and Services Interoperation (Paganini A&B)	
10:00 – 10:30	Coffee Break	
10:30 – 12:30	Session 2a Service-oriented Business Process Management (Paganini A&B)	Session 2b QoS in SOC (Puccini 1&2)
12:30 – 13:30	Lunch	
13:30 – 15:00	Session 3a Service Provisioning & Delivery I (Paganini A&B)	Session 3b Scheduling Services in the Cloud (Puccini 1&2)
15:00 – 15:30	Coffee Break	
15:30 – 16:30	Session 4a Service Provisioning & Delivery II (Paganini A&B)	Session 4b Services & Cloud (Puccini 1&2)
16:30 – 18:00	Session 5: Panel Big Data in the Services World (Paganini A&B)	

Tuesday, December 3, 2013

8:45 – 10:00

Session 1: Welcome & Keynote (Paganini A&B)

Chair: Samik Basu (Iowa State Univ., USA)

Richard Hull (IBM TJ Watson, USA)

Data-centricity and Services Interoperation

10:00 – 10:30 Coffee Break

10:30 – 12:30

Session 2a: Service-oriented Business Process Management (Paganini A&B)

Chair: Frank Leymann (Univ. of Stuttgart, Germany)

REFlex: An Efficient Web Service Orchestrator for Declarative Business Processes

Natália C. Silva, Renata M. de Carvalho, Cesar A.L. Oliveira, and Ricardo M.F. Lima (Federal Univ. of Pernambuco, Brazil)

Batch Activities in Process Modeling and Execution

Luise Pufahl and Mathias Weske (Univ. of Potsdam, Germany)

Priority-Based Human Resource Allocation in Business Processes

Cristina Cabanillas (Vienna Univ. of Economics and Business, Austria), *José María García* (Univ. of Innsbruck, Austria), *Manuel Resinas* (Univ. of Seville, Spain), *David Ruiz* (Univ. of Seville, Spain), *Jan Mendling* (Vienna Univ. of Economics and Business, Austria), and *Antonio Ruiz-Cortés* (Univ. of Seville, Spain)

Open Source Versus Proprietary Software in Service-Oriented: The Case of BPEL Engines

Simon Harrer, Jörg Lenhard, and Guido Wirtz (Univ. of Bamberg, Germany)

Session 2b: QoS in SOC (Puccini 1&2)

Chair: Heiko Ludwig (IBM TJ Watson, USA)

QoS-Aware Cloud Service Composition Using Time Series

Zhen Ye (Univ. of Queensland, Australia), *Athman Bouguettaya* (RMIT, Australia), and *Xiaofang Zhou* (Univ. of Queensland, Australia)

Personalized Quality Prediction for Dynamic Service Management based on Invocation Patterns

Li Zhang (Northeastern Univ., China), *Bin Zhang* (Northeastern Univ., China), *Claus Pahl* (Dublin City Univ., Ireland), *Lei Xu* (Dublin City Univ., Ireland), and *Zhiliang Zhu* (Northeastern Univ., China)

SHORT PAPER:

QoS-aware Multi-granularity Service Composition based on Generalized Component Services

Quanwang Wu, Qingsheng Zhu, and Xing Jian (Chongqing Univ., China)

SHORT PAPER:

An Incentive Mechanism for Game-based QoS-aware Service Selection

Puwei Wang and Xiaoyong Du (Renmin Univ. of China, China)

SHORT PAPER:

An Architecture to Provide Quality of Service in OGC SWE Context

Thiago C. Tavares, Regina H. C. Santana, Marcos J. Santana, and Julio C. Estrella (Inst. of Math. and Comp. Sci., Brazil)

12:30 – 13:30 Lunch

13:30 – 15:00

Session 3a: Service Provisioning & Delivery I (Paganini A&B)

Chair: Jian Yang (Macquarie Univ., Australia)

Improving Interaction with Services via Probabilistic Piggybacking

Carlo Ghezzi (Politecnico di Milano, Italy), *Mauro Pezze* (Univ. della Svizzera Italiana, Switzerland), and *Giordano Tamburrelli* (Univ. della Svizzera Italiana, Switzerland)

QoS-aware Service VM Provisioning in Clouds: Experiences, Models, and Cost Analysis

Mathias Bjoerkqvist, Sebastiano Spicuglia, Lydia Chen (IBM Research Zurich, Switzerland), and *Walter Binder* (Univ. of Lugano, Switzerland)

Provisioning Quality-aware Social Compute Units in the Cloud

Muhammad Z.C. Candra, Hong-Linh Truong, and Schahram Dustdar (Vienna Univ. of Tech., Austria)

Session 3b: Scheduling Services in the Cloud (Puccini 1&2)

Chair: Schahram Dustdar (Vienna Univ. of Tech., Austria)

Critical Path-Based Iterative Heuristic for Workflow Scheduling in Utility and Cloud Computing

Zhicheng Cai, Xiaoping Li (Southeast Univ., China), and *Jatinder N. D. Gupta* (Univ. of Alabama at Huntsville, USA)

Task Scheduling Optimization in Cloud Computing Applying Multi-Objective Particle Swarm Optimization

Fahimeh Ramezani, Jie Lu, and Farookh Hussain (Univ. of Tech. Sydney, Australia)

SHORT PAPER:

Patience-aware Scheduling for Cloud Services: Freeing Users from the Chains of Boredom

Carlos Cardonha, Marcos D. Assunção, Marco A. S. Netto, Renato L. F. Cunha (IBM Research, Brazil), and *Carlos Queiroz* (IBM Research, Australia)

15:00 – 15:30 Coffee Break

15:30 – 16:30

Session 4a: Service Provisioning & Delivery II (Paganini A&B)

Chair: Shiping Chen (CSIRO ICT Centre, Australia)

Optimal Strategy for Proactive Service Delivery Management Using Inter-KPI Influence Relationships

Gargi B. Dasgupta, Yedendra Shrinivasan, Tapan K. Nayak, and Jayan Nallacherry (IBM Research, India)

Does One-Size-Fit-All Suffice for Service Delivery Clients?

Shivali Agarwal, Renuka Sindhgatta, and Gargi Dasgupta (IBM Research, India)

Session 4b: Services & Cloud (Puccini 1&2)

Chair: Athman Bouguettaya (RMIT, Australia)

SHORT PAPER:

Evaluating Cloud Services using a Multiple Criteria Decision Analysis Approach

Pedro Costa, João Carlos Lourenço, and Miguel Mira da Silva (Tech. Univ. of Lisbon, Portugal)

SHORT PAPER:

A Cooperative Management Model for Volunteer Infrastructure as a Service in P2P Cloud

Jiangfeng Li and Chenxi Zhang (Tongji Univ., China)

SHORT PAPER:

Multi-level Elasticity Control of Cloud Services

Georgiana Copil, Daniel Moldovan, Hong-Linh Truong, and Schahram Dustdar
(Vienna Univ. of Tech., Austria)

16:30 – 18:00

Session 5: Panel: Big Data in the Services World (Paganini A&B)

Chair: Mathias Weske (Univ. of Potsdam, Germany)

Panelists:

Schahram Dustdar (Vienna Univ. of Technology, Austria)

Richard Hull (IBM TJ Watson, USA)

Felix Naumann (HPI, Univ. of Potsdam, Germany)

Manfred Reichert (Univ. of Ulm, Germany)

ICSOC 2013
Wednesday, 4 December 2013 (Day 2 of 3)

9:00 – 10:30	Session 6a Service Adaptation (Paganini A&B)	Session 6b Service Composition I (Puccini 1&2)	
10:30 – 11:00	Coffee Break		
11:00 – 12:00	Session 7: Tutorial 1 Manfred Reichert Managing Flexibility Challenges for Composite Services: Scenarios, Technologies, Tools (Paganini A&B)		
12:00 – 12:30	One-Minute Demo Presentations (Paganini A&B)		
12:30 – 13:30	Lunch		
13:30 – 15:00	Session 8a Service Composition II (Paganini A&B)	Session 8b Service Analysis (Puccini 1&2)	Session 8c Demos I (Verdi)
15:00 – 15:30	Coffee Break		
15:30 – 17:30	Session 9a Data-aware Business Processes (Paganini A&B)	Session 9b Industry Track (Puccini 1&2)	Session 9c Demos II (Verdi)

19:00 Conference Banquet

Wednesday, December 4, 2013

9:00 – 10:30

Session 6a: Service Adaptation (Paganini A&B)

Chair: Paul Grefen (Eindhoven Univ. of Tech., Netherlands)

On-the-Fly Adaptation of Dynamic Service-based Systems: Incrementality, Reduction and Reuse

Antonio Bucchiarone, Annapaola Marconi, Claudio Antares Mezzina, Marco Pistore, and Heorhi Raik (Fondazione Bruno Kessler, Italy)

Runtime Evolution of Service-based Multi-tenant SaaS Applications

Indika Kumara, Jun Han, Alan Colman, and Malinda Kapuruge
(Swinburne Univ. of Tech., Australia)

SHORT PAPER:

Goal Oriented Variability Modeling in Service-based Business Processes

Karthikeyan Ponnalagu (IBM Research, India & Univ. of Wollongong, Australia),
Nanjangud C. Narendra (IBM Software Lab, India), *Aditya Ghose* (Univ. of Wollongong, Australia),
Neeraj Chiktey (IBM Research & Int. Inst. of Info. Tech., India), and
Srikanth Tamilselvam (IBM Research, India)

Session 6b: Service Composition I (Puccini 1&2)

Chair: Boualem Benatallah (Univ. of New South Wales, Australia)

Multi-Objective Service Composition Using Reinforcement Learning

Ahmed Moustafa and Minjie Zhang (Univ. of Wollongong, Australia)

SHORT PAPER:

An Approach for Compliance-aware Service Selection with Genetic Algorithms

Fatih Karatas (Univ. of Siegen, Germany) and *Dogan Kesdogan* (Univ. of Regensburg, Germany)

SHORT PAPER:

Synthesizing Cost-Minimal Partners for Services

Jan Sürmeli and Marvin Triebel (Humboldt-Univ. zu Berlin, Germany)

10:30 – 11:00 Coffee Break

11:00 – 12:00

Session 7: Tutorial I (Paganini A&B)

Chair: Richard Hull (IBM TJ Watson, USA)

Manfred Reichert (Univ. of Ulm, Germany)

Managing Flexibility Challenges for Composite Services: Scenarios, Technologies, Tools

12:00 – 12:30

One-Minute Demo Presentations (Paganini A&B)

Chair: *Marco Montali* (Free Univ. of Bozen-Bolzano, Italy)

PPINOT Tool Suite: A Performance Management Solution for Process-Oriented Organisations

Adela del-Río-Ortega, Cristina Cabanillas, Manuel Resinas, and Antonio Ruiz-Cortés

SYBL+MELA: Specifying, Monitoring, and Controlling Elasticity of Cloud Services

Georgiana Copil, Daniel Moldovan, Hong-Linh Truong, and Shahram Dustdar

Modeling and Monitoring Business Process Execution

Piergiorgio Bertoli, Mauro Dragoni, Chiara Ghidini, Emanuele Martufi, Michele Nori,

Marco Pistore, and Chiara Di Francescomarino

A Tool for Business Process Architecture Analysis

Rami-Habib Eid-Sabbagh, Marcin Hewelt, and Mathias Weske

OpenTOSCA – A Runtime for TOSCA-based Cloud Applications

Tobias Binz, Uwe Breitenbücher, Florian Haupt, Oliver Kopp, Frank Leymann, Alexander

Nowak, and Sebastian Wagner

iAgree Studio: A Platform to Edit and Validate WS–Agreement documents

C. Müller, A.M. Gutiérrez, M. Resinas, P. Fernández, and A. Ruiz-Cortés

Winery – A Modeling Tool for TOSCA-based Cloud Applications

Oliver Kopp, Tobias Binz, Uwe Breitenbücher, and Frank Leymann

Barcelona: A design & runtime environment for declarative artifact-centric BPM

Fenno (Terry) Heath, III, David Boaz, Manmohan Gupta, Roman Vaculin, Yutian Sun,

Richard Hull, and Lior Limonad

12:30 – 13:30 Lunch

13:30 – 15:00

Session 8a: Service Composition II (Paganini A&B)

Chair: Marco Pistore (Fondazione Bruno Kessler, Italy)

Automatically Composing Services by Mining Process Knowledge from the Web

Bipin Upadhyaya, Ying Zou, Shaohua Wang (Queen's Univ., Canada), and

Joanna Ng (IBM Canada Software Lab, Canada)

SHORT PAPER:

DataSheets: A Spreadsheet-based Data-Flow Language

Angel Lagares Lemos, Moshe Chai Barukh, and Boualem Benatallah

(Univ. of New South Wales, Australia)

SHORT PAPER:

Automatic Composition of Form-Based Services in a Context-Aware Personal Information Space

Rania Khéfi (LRI, France), *Pascal Poizat* (CNRS and Paris Ovest Nanterre La Defense Univ., France),

and *Fatiha Saïs* (LRI, France)

SHORT PAPER:

Automated Service Composition for On-the-Fly SOAs

Zille Huma, Christian Gerth, Gregor Engels (Univ. of Paderborn, Germany), and

Oliver Juwig (HRS-Hotel Reservation Service, Germany)

Session 8b: Service Analysis (Puccini 1&2)

Chair: Olivier Perrin (Lorraine Univ., France)

Detection of SOA Patterns

Anthony Demange, Naouel Moha, and Guy Tremblay (Univ. du Québec à Montréal, Canada)

SHORT PAPER:

Automatic Generation of Test Models for Web Services using WSDL and OCL

Macías López, Henrique Ferreiro (Univ. da Coruña, Spain), *Miguel A. Francisco* (Interoud Innovation SL, Spain), and *Laura M. Castro* (Univ. da Coruña, Spain)

SHORT PAPER:

Extending WS-Agreement to Support Automated Conformity Check on Transport & Logistics Service Agreements

Antonio Manuel Gutierrez (Univ. de Sevilla, Spain), *Clarissa Cassales Marquezan* (Univ. of Duisburg-Essen, Germany), *Manuel Resinas* (Univ. de Sevilla, Spain), *Andreas Metzger* (Univ. of Duisburg-Essen, Germany), *Antonio Ruiz-Cortés* (Univ. de Sevilla, Spain), and *Klaus Pohl* (Univ. of Duisburg-Essen, Germany)

SHORT PAPER:

A Framework for Cross Account Analysis

Vugranam C. Sreedhar (IBM Research, USA)

Session 8c: Demo I (Verdi)

15:00 – 15:30 Coffee Break

15:30 – 17:30

Session 9a: Data-aware Business Processes (Paganini A&B)

Chair: Manfred Reichert (Univ. of Ulm, Germany)

Runtime Enforcement of First-order LTL Properties on Data-aware Business Processes

Riccardo De Masellis (Sapienza Univ. of Rome, Italy) and *Jianwen Su* (UC Santa Barbara, USA)

SHORT PAPER:

Reasoning on UML Data-Centric Business Process Models

Montserrat Estañol, Maria-Ribera Sancho, and *Ernest Teniente*
(Univ. Politècnica de Catalunya, Spain)

SHORT PAPER:

Process Refinement Validation and Explanation with Ontology Reasoning

Yuan Ren (Univ. of Aberdeen, UK), *Gerd Groener* (Univ. of Kobelnz-Landau, Germany), *Jens Lemcke,*
Tirdad Rahmani, Andreas Friesen (SAP Research, Germany), *Yuting Zhao, Jeff Z. Pan* (Univ. of
Aberdeen, UK), and *Steffen Staab* (Univ. of Kobelnz-Landau, Germany)

Session 9b: Industry Track (Puccini 1&2)

Chair: Lars Mönch (Univ. of Hagen, Germany)

Behavioral Analysis of Service Delivery Models

Gargi B. Dasgupta, Renuka Sindhgatta, and *Shivoli Agarwal* (IBM Research, India)

Decision Making in Crowdsourcing Services

Maja Vukovic and *Rajarshi Das* (IBM T.J. Watson, USA)

Towards Optimal Risk-aware Security Compliance of a Large IT System

Daniel Coffman, Bhavna Agrawal, and *Frank Schaffa* (IBM, USA)

SHORT PAPER:

A Novel Service Composition Approach for Application Migration to Cloud

Xianzhi Wang (IBM Research & Harbin Institute of Tech., China),

Xuejun Zhuo, Bo Yang, Fan Jing Meng, Pu Jin (IBM Research, China),

Woody Huang, Christopher C. Young, Catherine Zhang (IBM TJ Watson, USA),

Jing Min Xu (IBM Research, China), and *Michael Montinarelli* (IBM Global Tech. Services, USA)

Session 9c: Demo II (Verdi)

19:00 Conference Banquet

ICSOC 2013
Thursday, 5 December 2013 (Day 3 of 3)

9:00 – 10:00	Session 10: Keynote Carlo Ghezzi Surviving in a world of change: Towards evolvable and self-adaptive service-oriented systems (Paganini A&B)	
10:00 – 10:30	Coffee Break	
10:30 – 12:30	Session 11a Service & Process Discovery (Paganini A&B)	Session 11b Service Selection (Puccini 1&2)
12:30 – 13:30	Lunch	
13:30 – 14:30	Session 12: Tutorial II Jian Yang A Multi-Facet Exploration of QoS in Service oriented Computing (Paganini A&B)	
14:30 – 15:00	Coffee Break	
15:00 – 16:30	Session 13a QoS Prediction (Paganini A&B)	Session 13b Artifact-Centric Systems (Puccini 1&2)

Thursday, December 5, 2013

9:00 – 10:00

Session 10: Keynote (Paganini A&B)

Chair: Cesare Pautasso (Univ. of Lugano, Switzerland)

Carlo Ghezzi (Politecnico di Milano, Italy)

Surviving in a world of change: Towards evolvable and self-adaptive service-oriented systems

10:00 – 10:30 Coffee Break

10:30 – 12:30

Session 11a: Service & Process Discovery (Paganini A&B)

Chair: Flavio de Paoli (Univ. di Milano Bicocca, Italy)

Service Discovery from Observed Behavior While Guaranteeing Deadlock Freedom in Collaborations

Richard Müller (Humboldt-Univ. zu Berlin, Germany & TU Eindhoven, Netherlands), *Christian Stahl* (TU Eindhoven, Netherlands), *Wil M.P. van der Aalst* (TU Eindhoven, Netherlands & National Research Univ., Russia), and *Michael Westergaard* (TU Eindhoven, Netherlands & National Research Univ., Russia)

Process Discovery Using Prior Knowledge

Aubrey J. Rembert, *Amos Omokpo*, *Pietro Mazzoleni*, and *Richard T. Goodwin* (IBM TJ Watson, USA)

SHORT PAPER:

Deriving Business Process Data Architectures from Process Model Collections

Rami-Habib Eid-Sabbagh, *Marcin Hewelt*, *Andreas Meyer*, and *Mathias Weske* (Univ. of Potsdam, Germany)

SHORT PAPER:

A Case Management Approach to Serve Information Needs in Knowledge Intensive Processes

Debdoot Mukherjee (IBM Research, India), *Jeanette Blomberg*, *Rama Akkiraju* (IBM Almaden, USA), *Dinesh Raghu*, *Monika Gupta*, *Sugata Ghosal* (IBM Research, India), *Mu Qiao*, and *Taiga Nakamura* (IBM Almaden, USA)

Session 11b: Service Selection (Puccini 1&2)

Chair: Jianwen Su (UC Santa Barbara, USA)

Mirror, Mirror, on the Web, Which is the Most Reputable Service of Them All? --- A Domain-aware and Reputation-aware Method for Service Recommendation

Keman Huang (Tsinghua Univ., China), *Jinhui Yao* (Univ. of Sydney, Australia), *Yushun Fan* (Tsinghua Univ., China), *Wei Tan* (IBM TJ Watson, USA), *Surya Nepal* (CSIRO ICT Centre, Australia), *Yayu Ni* (Tsinghua Univ., China), and *Shiping Chen* (CSIRO ICT Centre, Australia)

WT-LDA: User Tagging Augmented LDA for Web Service Clustering

Liang Chen, *Yilun Wang* (Zhejiang Univ., China), *Qi Yu* (Rochester Inst. of Tech., USA), *Zibin Zheng* (Chinese Univ. of Hong Kong, HK), and *Jian Wu* (Zhejiang Univ., China)

SHORT PAPER:

Entity-Centric Search for Enterprise Services

Marcus Roy (SAP Research Sydney & Univ. New South Wales, Australia), *Ingo Weber* (NICTA Sydney & Univ. of New South Wales, Australia), and *Boualem Benatallah* (Univ. of New South Wales, Australia)

SHORT PAPER:

Tactical Service Selection with Runtime Aspects

Rene Ramacher and Lars Mönch (Univ. of Hagen, Germany)

SHORT PAPER:

Decomposing Ratings in Service Compositions

Icamaan da Silva (City Univ. London, UK) and *Andrea Zisman* (Open Univ., UK)

12:30 – 13:30 Lunch

13:30 – 14:30

Session 12: Tutorial II (Paganini A&B)

Chair: Liang Zhang (Fudan Univ., China)

Jian Yang (Macquarie Univ., Australia)

A Multi-Facet Exploration of QoS in Service oriented Computing

14:30 – 15:00 Coffee Break

15:00 – 16:30

Session 13a: QoS Prediction (Paganini A&B)

Chair: Carlo Ghezzi (Politecnico di Milano, Italy)

QoS Analysis in Heterogeneous Choreography Interactions

Ajay Kattapur, Nikolaos Georgantas, and Valerie Issarny (INRIA, France)

Prediction of Remaining Service Execution Time using Stochastic Petri Nets with Arbitrary Firing Delays

Andreas Rogge-Solti and Mathias Weske (Hasso-Plattner-Institut, Germany)

SHORT PAPER:

Online Reliability Time Series Prediction for Service-Oriented System of Systems

Lei Wang, Hongbing Wang (Southeast Univ., China), *Qi Yu* (Rochester Inst. of Tech., USA),

Haixia Sun (Southeast Univ., China), and *Athman Bouguettaya* (RMIT, Australia)

Session 13b: Artifact-Centric Systems (Puccini 1&2)

Chair: Antonio Ruiz-Cortés (Univ. of Sevilla, Spain)

Verification of Artifact-Centric Systems: Decidability and Modeling Issues

Dmitry Solomakhin, Marco Montali, Sergio Tessaris (Free Univ. of Bozen-Bolzano, Italy), and

Riccardo De Masellis (Sapienza Univ. of Rome, Italy)

SHORT PAPER:

Verification of Semantically-Enhanced Artifact Systems

Babak Bagheri Hariri, Diego Calvanese, Marco Montali, Ario Santoso, and

Dmitry Solomakhin (Free Univ. of Bozen-Bolzano, Italy)

SHORT PAPER:

MaxInsTx: A Best-effort Failure Recovery Approach for Artifact-centric Business Processes

Haihuan Qin, Guosheng Kang, and Lipeng Guo (Fudan Univ., China)