# **Greeting from General Chairs**

Dear ICSOC 2012 participant,

We would like to welcome you to Shanghai, and welcome to ICSOC 2012. It is the 10th edition of this international event in the area of service oriented computing. We are honored and privileged to host this prestigious conference in the field.

As in the previous years, the ICSOC 2012 program is an exciting showcase of recent development in the field, which consists of 6 workshops, one PhD symposium, 3 keynote speeches, a panel discussion and the presentation of very high quality papers.

ICSOC this year is hosted in Fudan University, which is one of the famous and most selective universities in China. Walking on the campus, we hope you could find some old charm in traditional Chinese architecture and garden.

Shanghai is a modern city with an amazing history. It is a city that offers a mixture of styles from past to modern, from western to oriental. For example, Yuyuan Garden is the largest ancient garden of Shanghai with Ming and Qing Dynasty architecture style. Near the garden, there is the City God Temple, which erected in 1602 for its important economic position. And of course we can see many important landmarks developed recently near the bund.

We would like to take this opportunity to thank all the members of the committees for the excellent job they have done in the preparation of this very exciting program. We also like to thank our sponsors for their valuable support to the conference, especially in this financially difficult time.

We wish you a fruitful and enjoyable stay and we sincerely hope you will find some free time to explore and enjoy Shanghai and its surroundings.

Jian Yang Liang Zhang

ICSOC2012 general co-chairs 2012-11-12

# **Keynotes and Panel**

# **KEYNOTE 1:** Rapid Rise and Evolution of Cloud Computing – How Will It Affect Web Services?

#### Abstract

Cloud computing is currently at the phase of rapid commercial, technical and conceptual development. The sales volume reached billions of dollars, growing yearly in double digits - and investment into cloud computing is growing even faster. But cloud computing is more than just a commercial phenomenon. The needs of traditional information processing were augmented by ever growing volume and functionality of mobile devices, cross-platform availability of services and ever ascending social and business inter-connectivity. The new technical and commercial realities will influence the way web services are designed, implemented and delivered and that will apply to both existing and new services. This is not just about quantitative change this is a qualitative change, with new concepts reshaping and replacing the old ones.

This talk will start with the brief background on why cloud computing is inevitable for technical and economic reasons and which types of use are most affected by it. That will be followed by a summary of the major competitors in the area of cloud computing, their strategies and approaches to solve the problems of service implementation and delivery. We will describe infrastructure problems, solutions and. Opportunities as well as the effects of these changes on software development and structuring of solutions to take advantage of cloud architecture and functionality. We will also consider how transient some trends are in this field and what are possible scenarios for future development.



**Bio:** Dr. Charles Loboz grew up in Poland and graduated with MSc in Nuclear Physics. After working for few years in the area of scientific computing, he obtained his PhD in Computer Science from the Australian National University. Dr. Loboz worked for UNISYS in the area of transaction processing systems authoring multiple patents architectural and performance analysis areas. After a brief episode with a start-up company he joined Microsoft as a Principal Capacity Planning Engineer in Global Foundation Services — a division responsible for building and operating Microsoft data centres worldwide. Two years ago Dr. Loboz moved to Windows Azure as a

Principal Architect, Capacity Planning. He has published occasional papers in both scientific and industry conferences and currently holds 10 patents, with few more patent applications in processing.

#### **KEYNOTE 2:** Cloud? It is all about Services

#### **Abstract**

Ever since the term Cloud Computing became a hot item, people have tried to paint and shape the clouds in various ways, often from the angles where they came from. Hardware and software companies will say that Cloud is the ultimate virtualization of systems. Data Center folks will argue that Cloud will provide the best energy efficiency. Security people will argue that cloud will not fly until the concern on security is eased. Then there are private clouds, public clouds, hybrid clouds, government clouds, education clouds, etc. Cloud is an area where the industries started the implementation first, while the academia in general was caught behind. When all the cloudy notions are clear, it is all about services. In fact, it is all about service engineering and management. In this presentation, the speaker will discuss the service science principles related to cloud, and the challenges of Cloud services, in the context of service engineering and service management, as well as the business implications. Academia institutions embracing the notion of Service Sciences or Serviceology beyond the traditional disciplines will be in better position to contribute and influence the future cloud agenda.



**Bio:** Dr. James T. Yeh is currently an independent researcher and consultant. Before August 2012, he was Director of Strategy, at Corporate Strategy of IBM. His primary role was to address strategic elements of IBM's businesses for achieving growth in emerging markets, including Cloud Computing. He was Chief Technology Officer of IBM Greater China Group during 2006-2008. Between 1999 and 2006, he was Director of IBM China Research Laboratory and led research activities related to Service Science and engineering, information analytics, business optimization, e-business enabling technologies, knowledge management, pervasive computing infrastructure, and human information interactions. Dr. Yeh was born in Nanjing, China. He received his Ph. D. from

University of Pennsylvania in 1975. He joined IBM Research in 1977 to explore advanced circuits and materials. During the 80's, he researched on advanced manufacturing technologies and processes. His team developed nanometer scale diagnosis systems for manufacturing quality improvement, including the Magnetic Force Microscopy and Atomic Force Microscopy. He led the industry solutions and business research at the IBM T. J. Watson Research Center during the late'90's. The pioneering work of business analytics span from business modeling, production planning and scheduling, demand forecasting and management, intelligent decision support, and integrated supply chain. Dr. Yeh was one of the recipients of 1998 D. Wagner Award for excellence in operations research. He has seven plateaus of invention achievement. He was appointed Director of IBM China Research Lab in 1999. He was vice chair of the Supply Chain Council, China Chapter, during 2005 and 2006. Dr. Yeh was guest professor at Harbin Institute of Technology, Zhejiang University, and Lifetime Honorary Professor at Xian Jiaotong University. He was vice chair of the Cloud Computing Expert Group of Chinese Institute of Electronics between November 2008 - 2010.

Since 2005, Dr. Yeh has been both an avid researcher and an advocate for Service Science in the Asia Pacific area. He was the brain trust in creating the initial International Symposia on Service Science, Management, and Engineering in 2005 and 2006, which later became International Conference on Service Sciences (ICSS). He served as an Advisor to PRC Ministry of Education Service Science Experts Committee. He was General Chair of 2010 International Conference on Services Sciences (ICSS2010), co-chair of the First International Conference on Service Sciences and Innovation (ICSSI, 2009), and delivered keynote speeches at International Conference on E-Commerce 2009 (Challenges of Service Science for eCommerce Innovation) and at many other conferences. In the area of Cloud Computing, he delivered the keynote speech at CloudCom 2009 (The Many Colors and Shapes of Cloud).

#### **KEYNOTE 3: Challenges in Service Modeling, Composition, and Analysis**

#### Abstract

Arguably, the greatest impact from the decade old web services research is the formulation of the SOA principle. Indeed, SOA is turning into a philosophy to guide the thinking for modern software system design in application contexts from cloud computing, social network, to business process management. Techn2ically, this philosophy demands independence of conceptual design considerations from implementation level limitations.

A necessary road to achieve independence is through high degree of automation in design, analysis, implementation, and evolution aspects. Clearly, formalization plays a vital role in developing service composition design and analysis tools. Service modeling refers to development of appropriate technical models that enable effective design and analysis techniques. In this talk, we explore key technical challenges in formal modeling for services.



**Bio:** Jianwen Su is currently a Professor of Computer Science at the University of California, Santa Barbara. He received both B.S. and M.S. in computer science from Fudan University and Ph.D. in computer science from University of Southern California. He held visiting positions at INRIA and Bell Labs and is an adjunct professor at Fudan and Donghua Universities in China. He has published in a wide range of topics including data modeling and query languages, scientific and spatial data management, formal verification, web services, and BPM/workflow. His work on web service composition and analysis and on artifact-centric business workflow is widely

known. Dr. Su received IBM Faculty Awards (2007, 2008). He served on program committees of many conferences in the areas of databases (e.g., PODS, ICDT, VLDB, ICDE, etc.) and service-oriented computing and BPM (e.g., ICSOC, BPM, ICWS, CEC, etc.). He was the general chair of SIGMOD 2001, the PC chair of PODS 2009, a program co-chair of workshop/conferences including WS-FM 2009 and MDM 2007. He also served on the Executive Committees of both ACM SIGMOD and PODS.

#### **PANEL: Cloud or Not Cloud**

Panellists: Kamal Bhattacharya

Yiwei Chen

Schahram Dustdar

Stefan Tai Jianwen Su Cesare Pautasso

#### **Brief Bios of Panellists:**

Kamal Bhattacharya is the director of the IBM Research - Africa lab, headquartered in Nairobi, Kenya. The recently announced lab will focus on Next Generation Public Sector, Smarter Cities and Human Capability development. In his previous role he was the Senior Manager at IBM Research- India, Bangalore focusing on topics around Cloud Computing, especially application migration to the Cloud, IT services delivery in the context of IT outsourcing and social computing in the enterprise. Before joining IBM Research - India, Kamal lead a team at IBM Watson Research, NY, US, exploring new ideas in the area of IT Optimization with a focus on data center consolidation and application migration. Prior to that he has been working as a Research Staff Member at Watson in the Model-driven Business Transformation team. Dr. Bhattacharya has received three IBM Outstanding Technical Achievement Award and several IBM Research Division awards for his work. Furthermore, he has received several best paper awards at international conferences for his contributions in the area of business process management and IT service management. Kamal is an elected member of the IBM Academy of Technology. Kamal started his career at IBM as an IT architect at IBM Global Services in Germany. He graduated with a PhD in Theoretical Physics from Goettingen University, Germany, in 1999.

Yiwei Chen is a Senior Engineering Director with Telenav Inc. and in charge of its Shanghai Development Center. Telenav is a leader in personalized and cloud based navigation company based in Sunnyvale, California. Prior to Telenav, Yiwei served Google Inc. as a Technical Director in charge of Asia Pacific Partner Engineering, and also served BEA Systems (acquired by Oracle) as the Principle Architect for Asia Pacific. Yiwei has extensive experience in Cloud and Service-Oriented Architecture practices. His technical interests span from Cloud Computing, SOA, LBS, Search, Advertisement, Big Data & Analytics, to Computer Graphics and Neural Networks. He possesses working knowledge with Internet services, mobile applications, telecommunications, financial services, oil and gas, energy and utilities, healthcare, and high-tech manufactures across both North America and Asia Pacific. Yiwei received his PhD degree in computer science from University of Houston, Texas, and MS degree in computer science from Fudan University in Shanghai.

**Schahram Dustdar** is Full Professor of Computer Science (Informatics) with a focus on Internet Technologies heading the Distributed Systems Group. He is an ACM Distinguished Scientist

(2009) and was awarded the IBM Faculty Award (2012). Dustdar is Editor-in-Chief of Computing (Springer), an SCI-ranked journal, an Associate Editor of IEEE Transactions on Services Computing (TSC), and an Editorial Board member and Department editor for IEEE Internet Computing.

**Stefan Tai** is Professor at the Karlsruhe Institute of Technology (KIT). Stefan is also Director at the FZI Research Center for Information Technology in Karlsruhe, and Scientific Director of the FZI offices in Berlin. Stefan does research in the areas of Service Computing and Cloud Computing, in particular, on systems and tools for managing non-trivial qualities of cloud services and service compositions.

**Jianwen Su** is a Professor at University of California, Santa Barbara. He received B.S./M.S. from Fudan University and Ph.D. from University of Southern California. His research interests include data modeling and query languages, scientific and spatial data management, formal verification, web services, and business workflow. He served on program committees of many conferences in the areas of databases and service-oriented computing. He was the general chair of SIGMOD 2001, the PC chair of PODS 2009, a program co-chair of several conferences and workshops.

**Cesare Pautasso** is assistant professor at the Faculty of Informatics at the University of Lugano, Switzerland. Previously he was a researcher at the IBM Zurich Research Lab and a senior researcher at ETH Zurich, where he received his PhD in 2004. His research group focuses on building experimental systems to explore the intersection of model-driven software composition techniques, business process modelling languages, and autonomic/Cloud computing. He was the general chair of ECOWS 2011 and started the WS-REST workshop series at the WWW conference. He recently co-authored a book on SOA with REST published by Prentice Hall.

# Monday, 12 November 2012 Workshops and PhD Symposium

 ASC 2012: The 1<sup>st</sup> International Workshop on Analytics Services on the Cloud

Chairs: Yu Deng, Liangzhao Zeng

(8:50am – 4:00pm Guanghua Building, East Annex, Meeting Room 103)

 DISA 2012: 2012 International Workshop on Data Intensive Services based Application

Chairs: Ying Li, Shiyong Lv, Shuiguang Deng

(9:20am – 3:00pm Guanghua Building Meeting Room 404)

 PAASC 2012: 2<sup>nd</sup> International Workshop on Performance Assessment and Auditing in Service Computing 2012,

Chair: Claudia-Melania Chituc

(8:45am – 12:00pm Guanghua Building Meeting Room 405)

 SCEB 2012: 1<sup>st</sup> Workshop on Service Clouds in the Enterprise and Beyond Chairs: Hua Liu, Lam-Son Le, Alex Norta, 9:00am – 4:30pm Guanghua Building Meeting Room 406)

 SeMaPS 2012: 1<sup>st</sup> International Workshop on Self-Managing Pervasive Service Systems

Chairs: Weishan Zhang, Klaus Marius Hanen, Paolo Bellavista (8:50am – 4:30pm Guanghua Building, Meeting Room 408)

 WESOA 2012: 8<sup>th</sup> International Workshop on Engineering Service-Oriented Applications

Chairs: George Feuerlicht, Howard Foster, Winfried Lamersdorf, Guadalupe Ortiz

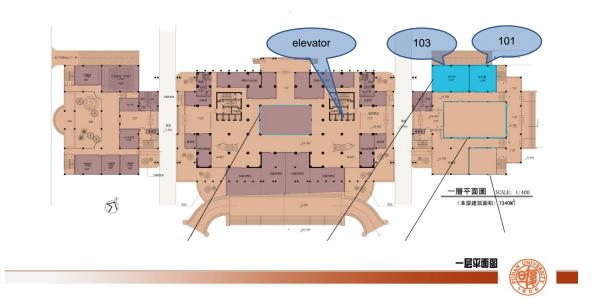
(9:00am – 5:00pm Guanghua Building, East Annex, Meeting Room 101)

PhD Symposium

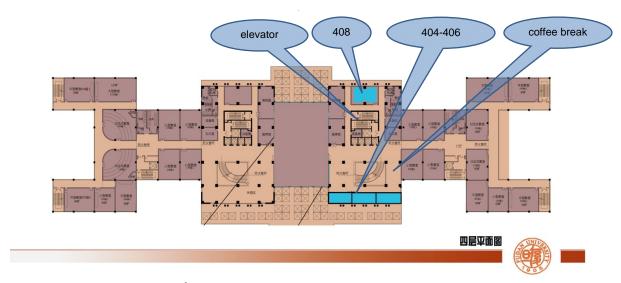
Chairs: Olivier Perrin, Jianmin Wang, Yan Wang

(1:30pm – 5:00pm Guanghua Building Meeting Room 405)

### FLOOR PLAN (GUANGHUA BUILDING)



1<sup>st</sup> Floor (Guanghua Building, East Annex)



4<sup>th</sup> Floor (Guanghua Building)

# ASC 2012: The 1<sup>st</sup> International Workshop on Analytics Services on the Cloud

Chairs: Yu Deng, Liangzhao Zeng (8:50am – 4:00pm Guanghua Building, East Annex, Meeting Room 103)

8:50am-9:00am	Opening ASC 2012
9:00am-9:30am	A Performance Evaluation of Public Cloud Using TPC-C. Jinhui Yao, Alex Ng, Shiping Chen, Dongxi Liu, Carsten Friedrich and Surya Nepal
9:30am-10:00am	An Efficient Data Maintenance Strategy for Data Service Mashup Based on Materialized View Selection. Peng Zhang, Yanbo Han and Guiling Wang
10:00am-10:30am	Coffee break (on the 4 <sup>th</sup> floor of Guanghua Building)
10:30am-11:00am	Homomorphic-Encryption-Based Separation Approach for Outsourced Data Management.  Yang Zhang and Jun-Liang Chen
11:00am-11:30am	Protecting Software as a Service in the Clouds by Validation. Tien-Dung Cao and Kevin Chiew.
11:30am-12:00pm	Identifying Fake Feedback for Effective Trust Management in Cloud Environments.  Talal H. Noor, Quan Z. Sheng, Abdullah Alfazi, Jeriel Law and Anne H.H. Ngu.
12:00pm-1:30pm	Lunch (at Fuxuan Hotel)
1:50pm-2:20pm	A Workflow Model for Interactive Mobile Cloud Applications. Verdi March, Yan Gu and Bu Sung Lee. Sonata
2:20pm-2:50pm	A Hybrid-Cloud Unstructured Information Platform for Full Automation of Service Composition, Scalable Deployment and Evaluation.  Yoshinobu Kano. Kachako: Kachako
3:00pm-3:30pm	Coffee break (on the 4 <sup>th</sup> floor of Guanghua Building)

# **DISA 2012: International Workshop on Data Intensive Services** based Application

Chairs: Ying Li, Shiyong Lv, Shuiguang Deng (9:20am – 3:00pm Guanghua Building Meeting Room 404)

3:00pm -3:30pm

Coffee break

9:20am-9:30am	Opening DISA 2012
9:30am-10:00am	An End-User Oriented Approach for Business Process Personalization from Multiple Sources Sida Xue, Budan Wu and Junliang Chen
10:00am-10:30am	Coffee break
10:30am-11:00am	A Combination Approach for QoS Prediction of Web Service Menmen Wu, Dongjing Yu and Yin Yuyu
11:00am-11:30am	Effective and Efficient Web Reviews Extraction Based on Hadoop  Jian Wan, Jiawei Yan and Congfeng Jiang
12:00pm-1:30pm	Lunch (at Fuxuan Hotel)
1:30pm-2:00pm	Intelligent Information Management of Tourist Attractions based on Semantic Sensor Web Xiaoming Zhang, Wanzhen Zhou and Yongqiang Zhang
2:00pm-2:30pm	An Optimal QoS-based WSMO Web Service Composition Approach using Genetic Algorithm Zhou Xiangbing
2:30pm-3:00pm	Ending DISA 2012

# PAASC 2012: 2<sup>nd</sup> International Workshop on Performance Assessment and Auditing in Service Computing

**Chair: Claudia-Melania Chituc** 

12:00pm-1:30pm

(8:45am – 12:00pm Guanghua Building Meeting Room 405)

8:45am-9:00am Opening PAASC 2012 9:00am-9:30am Definition of a Framework Supporting High Level Reliability of Services Firmino Silva and Claudia-Melania Chituc 9:30am-10:00am A Service-Oriented Approach to Assess the Value of Digital Preservation Claudia-Melania Chituc and Petra Ristau 10:00am-10:30am Coffee break 10:30am-11:00am Specification and Deployment of Distributed Monitoring and Adaptation Infrastructures Christian Inzinger, Benjamin Satzger, Waldemar Hummer and Schahram Dustdar Introducing the Vienna Platform for Elastic Processes 11:00am-11:30am Stefan Schulte, Philipp Hoenisch, Srikumar Venugopal and Schahram Dustdar 11:30am-11:55am Open Discussion on selected topics. 11:55am-12:00pm Closing PAASC 2012.

Lunch (at Fuxuan Hotel)

# SCEB 2012: 1<sup>st</sup> Workshop on Service Clouds in the Enterprise and Beyond

Chairs: Hua Liu, Lam-Son Le, Alex Norta, 9:00am – 4:30pm Guanghua Building Meeting Room 406)

09:00am-09:30am TrustVis: A Trust Visualisation Service for Online

Communities

Sanat Kumar Bista, Payam Aghaei Pour, Nathalie Colineau,

Surya Nepal, Cecile Paris

09:30am-10:00am Crowd-Sourcing Service Designs: Overview and Research

Challenges

Nidhi Rajshree, Bikram Sengupta and Nirmit V. Desai

10:00am-10:30am Coffee break

10:30am-11:30am KEYNOTE: "Cloud Services Life Cycle Intelligence"

Boualem Benatallah

12:00pm-1:30pm Lunch (at Fuxuan Hotel)

01:30pm-02:00pm Towards an Architectural Framework for Service-Oriented

Enterprises

Nanjangud Narendra, Lam-Son Le, Aditya Ghose and

Gandhi Sivakumar.

02:00pm-02:30pm Monitoring Business Process Interaction

Nico Herzberg, Matthias Kunze and Mathias Weske.

02:30pm-03:00pm Interactive Product Browsing and Configuration using

Remote Augmented Reality Sales Services Ross Brown, Helen Paik and Alistair Barros

03:00pm-03:30pm Coffee break

03:30pm-04:30pm Discussion and planning for SCEB'13

# SeMaPS 2012: 1<sup>st</sup> International Workshop on Self-Managing Pervasive Service Systems

Chairs: Weishan Zhang, Klaus Marius Hanen, Paolo Bellavista (8:50am – 4:30pm Guanghua Building, Meeting Room 408)

8:50am-9:00am	Opening SeMaPS 201
9:00am-10:00am	Keynote 1: by Prof. Zhongwen Guo
10:00am-10:30am	Coffee break
10:30am-10:55am	A Reformative System Architecture of Cloud Service Based on IEEE 1851  Mingxing Jiang, Zhongwen Guo and Chao Liu
10:55am-11:20am	Towards RESTful Communications in Self-Managing Pervasive Systems Meherun Nesa Lucky, Christina Tziviskou and Flavio De Paoli
11:20am-11:55am	A Research Roadmap for Context-Awareness-based Self-Managed Systems Weishan Zhang, Klaus Marius Hansen, Paolo Bellavista
12:00pm-1:30pm	Lunch (at Fuxuan Hotel)
12:00pm-1:30pm 1:30pm-2:30pm	Lunch (at Fuxuan Hotel)  Keynote 2: by Prof. Zhiwen Yu
	,
1:30pm-2:30pm	Keynote 2: <i>by Prof. Zhiwen Yu</i> A 3D Model based Action Recorder using Computer Vision
1:30pm-2:30pm 2:30pm-3:00pm	Keynote 2: by Prof. Zhiwen Yu  A 3D Model based Action Recorder using Computer Vision Yong Li, Yuan Rao, Youxiang Duan, and Weishan Zhang
1:30pm-2:30pm 2:30pm-3:00pm 3:00pm-3:30pm	Keynote 2: by Prof. Zhiwen Yu  A 3D Model based Action Recorder using Computer Vision Yong Li, Yuan Rao, Youxiang Duan, and Weishan Zhang  Coffee break  Protecting Sensitive Attributes in Attributed Based Access Control

# WESOA 2012: 8th International Workshop on Engineering Service-Oriented Applications

Chairs: George Feuerlicht, Howard Foster, Winfried Lamersdorf, Guadalupe Ortiz

(9:00am – 5:00pm Guanghua Building, East Annex, Meeting Room 101)

9:00am-9:15am	Welcome by workshop chairs
9:15am-10:00am	Keynote: Managing Requirements Evolution in Service Oriented System Didar Zowghi
10:00am-10:30am	Coffee break (on the 4 <sup>th</sup> floor of Guanghua Building)
10:30am-11:00am	Towards Automated and Correct Composition of Timed Services  Daniel Stöhr, Sabine Glesner
11:00am-11:30am	Resolving Violations in Inter-Process Relationships in Business Process Ecosystems Tri Astoto Kurniawan, Aditya K. Ghose, Lam-Son Le
11:30am-12:00pm	An Aspect-oriented Approach to Enforce Security Properties in Business Processes Inaya Yahya, Sameh Hbaieb Turki, Anis Charfi, Slim Kallel, Rafik Bouaziz
12:00pm-1:30pm	Lunch (at Fuxuan Hotel)
1:30pm-2:00pm	Evaluation of Quality of Design for Document-centric Software Services George Feuerlicht
2:00pm-2:30pm	Resource Management for Pervasive Systems  Jacky Estublier, German Vega, Elmehdi Damou
2:30pm-3:00pm	Service Oriented Requirements Engineering: Practitioner's Perspective Muneera Bano Sahibzada, Didar Zowghi
3:00pm-3:30pm	Coffee break (on the 4 <sup>th</sup> floor of Guanghua Building)
3:30pm-4:00pm	Planning and Workshop Summary

# PhD Symposium Chairs: Olivier Perrin, Jianmin Wang, Yan Wang (1:30pm – 5:00pm Guanghua Building Meeting Room 405)

1:30pm-2:00pm	Data Consistency Enforcement on Business Process Transactions Xi, Liu
2:00pm-2:30pm	An Auction-based Approach for Composite Web Service Selection Mahboobeh Moghaddam
2:30pm-3:00pm	Data-centric Probabilistic Process System Haizhou Li
3:00pm-3:30pm	Coffee break
3:30pm-4:00pm	Detection of SOA Antipatterns Francis Palma
4:00pm-4:30pm	Requirements-Driven Software Service Evolution Fenglin, Li
4:30pm-5:00pm	Detecting Runtime Business Process Compliance with Artifact lifecycles <i>Qi He</i>

# ICSOC 2012 Tuesday, 13 November 2012 (Day 1 of 3)

	Conference Hall	No. 2 Meeting Room
8:45am	Welcome and Keynote 1:	
-	Dr. Charles Loboz (Microsoft)	
10:00am	Chair: Chengfei Liu	
10:00am		
-	Coffee Break	
10:30am		
10:30am	Research Paper Session:	Research Paper Session: Service
-	Service Engineering 1	Management 1
12:00pm	Chair: Hamid Reza	Chair: Flavio De Paoli
	Motahari-Nezhad	
12:00pm		
-	Lunch Brea	k (Fuxuan Hotel)
1:30pm		
1:30pm	Research Paper Session:	Industrial Paper Session:
-	Cloud	Service Applications
3:00pm	Chair: Stefan Tai	Chair: Yan Wang
3:00pm		
-	Coffee Break	
3:30pm		
3:30pm	Research Short Paper Session:	Research Short Paper Session:
-	Service Composition and	Process Management
4:50pm	Choreography	Chair: Jenny Yan Liu
	Chair: Gerald Kotonya	

#### **Service Engineering 1**

Specification and Detection of SOA Antipatterns
Naouel\_Moha, Francis Palma, Mathieu Nayrolles, Benjamin Joyen Conseil, Yann-Gaël
Guéhéneuc, Benoit Baudry, Jean-Marc Jézéquel

Verification of GSM-based artifact-centric systems through finite abstraction Francesco Belardinelli, Alessio Lomuscio, Fabio Patrizi

Service Component Architecture Extensions for Dynamic Systems Joao Claudio Americo, Didier Donsez

#### **Service Management 1**

Who Do You Call? Problem Resolution Through Social Compute Units Bikram Sengupta, Anshu Jain, Kamal Bhattacharya, Hong-Linh Truong, Schahram Dustdar

Relationship-preserving Change Propagation in Process Eco-systems Tri Astoto Kurniawan, Aditya K. Ghose, Hoa Khanh Dam, Lam-Son Le

Scheduling Service Tickets in Shared Delivery Hari S. Gupta, Bikram Sengupta

#### **Service Applications (Industry Papers)**

RETRAiN: A REcommendation Tool for Reconfiguration of RetAil BaNk Branch Rakesh Pimplikar, Sameep Mehta

Automate back office activity monitoring to drive operational excellence *Miao He, Tao Qin, Changrui Ren, Sai Zeng, Lei Yuan* 

A Service Oriented Architecture for Exploring High Performance Distributed Power Models

Yan Liu, Jared Chase, Ian Gorton

#### Cloud

Programming Hybrid Services in the Cloud Hong-Linh Truong, Schahram Dustdar, Kamal Bhattacharya

QoS-Aware Cloud Service Composition based on Economic Models *Zhen Ye, Athman Bouquettaya, Xiaofang Zhou* 

Cloud Service Selection based on Variability Modeling Erik Wittern, Jörn Kuhlenkamp, Michael Menzel

#### Service Composition & Choregraphy (Short Papers)

Ensuring Well-formed Conversations Between Control and Operational Behaviors of Web Services

Scott Bourne, Claudia Szabo, Quan Sheng

Variability in Service-Oriented Systems: An Analysis of Existing Approaches Holger Eichelberger, Christian Kröher, Klaus Schmid

A Symbolic Framework for the Conformance Checking of Value-Passing Choreographies Huu Nghia Nguyen, Pascal Poizat, Fatiha Zaïdi

Service Composition Management Using Risk Analysis and Tracking Shang-Pin Ma, Ching-Lung Yeh

#### **Process Management (Short Papers)**

Assisting Business Process Design by Activity Neighborhood Context Matching Nguyen Ngoc Chan, Walid Gaaloul, Samir Tata

Case Management in the Social Enterprise Hamid Reza Motahari-Nezhad, Claudio Bartolini, Sven Graupner, Susan Spence

Automating Form-based Processes through Annotation Sung Wook Kim, Hye-Young Paik, Ingo Weber

PASOAC-Net: A Petri-Net Model to Manage Authorization in Service-Based Business Process

Haiyang Sun, Weiliang Zhao, Surya Nepal

# ICSOC 2012 Wednesday, 14 November 2012 (Day 2 of 3)

	Conference Hall	No. 2 Meeting Room	No. 1 Meeting Room
9:00am	Keynote 2: Dr. James T.		
-	Yeh, Independent		
10:00am	Researcher and		
	Consultant		
	Chair: Heiko Ludwig		
10:00am			
-		Coffee Break	
10:30am 10:30am	Daggarah Danar Sagaian	Decemb Demor	Industrial Chart Daner
10.30am	Research Paper Session: Service Engineering 2	Research Paper Session: Service	Industrial Short Paper Session
12:00pm	Service Linginicering 2	Management 2	00001011
12.000111	Chair: Schahram Dustdar		Chair: Qi Yu
		Chair: Manuel Carro	
12:00pm	_		
4.00	L	₋unch Break (Fuxuan Hote	el)
1:30pm	Danasah Danas Casalan	Indicate al Dance	Demo Session 1
1:30pm	Research Paper Session: Service QoS	Industrial Paper Session: Cloud	Demo Session 1
3:00pm	Service QUS	Computing	
0.00pm	Chair: Bikram Sengupta		
		Chair: Zibin Zheng	
3:00pm -	Coffee Break		
3:30pm			
3:30pm	Research Short Paper	Research Short Paper	Demo Session 2
-	Session: Service	Session: Service	
4:50pm	Description and	Management	
	Discovery	Chair: Maja Vukovic	
	Chair: Shiping Chen		
5:00pm	Panel: Cloud or Not		
-	Cloud		
6:30pm	Panellists:		
	Kamal Bhattacharya		
	Yiwei Chen		
	Schahram Dustdar Stefan Tai		
	Jianwen Su		
	Cesare Pautasso		
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#### Service Engineering 2

Extending Enterprise Service Design Knowledge using Clustering Marcus Roy, Ingo Weber, Boualem Benatallah

Participatory Service Design through Composed and Coordinated Service Feature Models

Erik Wittern, Nelly Schuster, Jörn Kuhlenkamp, Stefan Tai

PerCAS: An Approach to Enabling Dynamic and Personalized Adaptation for Context-Aware Services

Jian Yu, Jun Han, Michael Sheng

#### **Service Management 2**

A Method for Assessing Influence Relationships Among KPIs of Service Systems Yedendra Shrinivasan, Gargi Dasgupta, Nirmit Desai, and Jayan Nallacherry

Dynamic Performance Management in Multi-tenanted Business Process Servers using Nonlinear Control

Tharindu Patikirikorala

An Optimized Derivation of Event Queries to Monitor Choreography Violations Aymen Baouab, Olivier Perrin, Claude Godart

#### **Cloud Computing (Industry Papers)**

MapReduce based Data Stream Processing over Large History Data Kaiyuan Qi

An Efficient Data Dissemination Approach for Cloud Monitoring Xingjian Lu, Jianwei Yin, Ying Li, Shuiguang Deng, Mingfa Zhu

Collective Intelligence for Enhanced Quality Management of IT Services Maja Vukovic, Arjun Natarajan

#### **Service QoS**

Dynamic Service Selection with End-To-End Constrained Uncertain QoS Attributes Rene Ramacher, Lars Mönch

A Constraint-Based Approach to Quality Assurance in Service Choreographies Dragan Ivanovic, Manuel Carro<sup>1</sup>, Manuel V. Hermenegildo

Structural Optimization of Reduced Ordered Binary Decision Diagrams for SLA Negotiation in IaaS of Cloud Computing Kuan Lu, Ramin Yahyapour, Edwin Yaqub, Constantinos Kotsokalis

#### Service Description & Discovery (Short Papers)

WSTRank: Ranking Tags to Facilitate Web Service Mining Liang Chen, Zibin Zheng, Yipeng Feng, Jian Wu, Michael R. Lyu

Maintaining Motivation Models (in BMM) in the context of a (WSDL-S) Service Landscape

Konstantin Hoesch-Klohe, Aditya Ghose, Hoa Khanh Dam

Ontology-Learning-Based Focused Crawling for Online Service Advertising Information Discovery and Classification

Hai Dong, Farookh Hussain, Elizabeth Chang

A Learning Method for Improving Quality of Service Infrastructure Management in New Technical Support Groups

David Loewenstern, Florian Pinel, Larisa Shwartz, Maira Gatti, Ricardo Herrmann

#### **Service Management (Short Papers)**

Adaptive Service-Oriented Mobile Applications: A Declarative Approach Gianpaolo Cugola, Carlo Ghezzi, Leandro Sales Pinto, Giordano Tamburrelli

Algorithms and Complexity Problems in Planning Under Uncertainty For Service Delivery Organizations

Sreyash Kenkre, Vinayaka Pandit, Ranganath Kondapally

A Dynamic QoS-Aware Semantic Web Service Composition Algorithm *Pablo Rodriguez-Mier, Manuel Mucientes, Manuel Lama* 

IT Incident Management by Analyzing Incident Relations Rong Liu, Juhnyoung Lee

#### **Industry Short Papers**

Business Process Extensions as First-Class Entities - A Model-Driven and Aspect-Oriented Approach

Heiko Witteborg, Anis Charfi, Mohamed Aly, Ta'id Holmes

Towards Dynamic Reconfiguration for QoS consistent Services based Applications Ying Li, Yuyu Yin

An Ontology-Based IoT Resource Model for Resources Evolution and Reverse Evolution Shuai Zhao, Yang Zhang, Junliang Chen

#### Demo 1

A Dynamic SCA-based System for Smart Homes and Offices Calmant, Thomas; Americo, Joao Claudio; Donsez, Didier; Gattaz, Olivier

Realizing Elastic Processes with PEP

Schulte, Stefan; Hoenisch, Philipp; Venugopal, Srikumar; Dustdar, Schahram

A Social Network based Collaborative Video Story Composition Platform Wang, Chen; Meng, Meng; Zhou, Xiangmin; Ranjan, Rajiv

BPMashup: Dynamic Execution of RESTful Processes Xu, Xiwei; Weber, Ingo; Zhu, Liming; Liu, Yan; Rimba, Paul; Lu, Qinghua

#### Demo 2

SODA: A Tool Support for the Detection of SOA Antipatterns
Nayrolles, Mathieu; Palma, Francis; Moha, Naouel; Guéhéneuc, Yann-Gaël

Method and System for In-Place Modeling of Business Process Extensions as First-Class Entities

Witteborg, Heiko; Charfi, Anis; Wei, Wei; Holmes, Ta'id

Supporting Business and IT through Updatable Process Views: The proView Demonstrator Kolb, Jens; Reichert, Manfred

# ICSOC 2012 Thursday, 15 November 2012 (Day 3 of 3)

	Conference Hall	No. 2 Meeting Room	
9:00am	Keynote 3: Prof. Jianwen Su		
- 10:00am	Chair: Farouk Toumani		
10:00am - 10:30am	Cof	Coffee Break	
10:30am -	Research Paper Session: Service Engineering 3	Research Paper Session: Service Security, Privacy and Personalization	
12:00pm	Chair: Boualem Benatallah	Chair: Jian Yu	
12:00pm - 1:30pm	Lunch Brea	ak (Fuxuan Hotel)	
1:30pm - 3:00pm	Research Paper Session: Service Applications in Business and Society Chair: Surya Nepal	Research Paper Session: Service Composition and Choreography Chair: Winfried Lamersdorf	
3:00pm - 3:30pm	Coffee Break		
3:30pm	Research Paper Session: Service Scaling and Cloud	Research Short Paper Session: Service Security, Privacy and Personalization	
5:00pm	Chair: Fabio Patrizi	Chair: Ingo Weber	

#### **Service Engineering 3**

A Service Composition Framework Based on Goal-Oriented Requirements Engineering, Model Checking, and Qualitative Preference Analysis

Zachary J. Oster, Syed Adeel Ali, Ganesh Ram Santhanam, Samik Basu, Partha Roop

WCP-nets: A Weighted Extension to CP-nets for Web Service Selection Hongbing Wang, Jie Zhang, wenlong Sun, hongye Song, Guibing Guo, Xiang Zhou

WS-Finder: A Framework for Hybrid Similarity Search of Web Services Jiangang Ma, Quan Z. Sheng, Kewen Liao

#### Service Security, Privacy and Personalization

A Framework of Trusted Services Icamaan da Silva, Andrea Zisman

Configuring Private Data Management as Access Restrictions: From Design to Enforcement

Aurelien Faravelon, Stéphanie Chollet, Christine Verdier, Agnes Front

Modeling User's Non-Functional Preferences for Personalized Service Ranking Rozita Mirmotalebi, Chen Ding, and Chi-Hung Chi

#### Service Composition and Choreography

Declarative Choreographies for Artifacts *Yutian Sun, Wei Xu, Jianwen Su* 

Managing Resource Contention in Embedded Service-Oriented Systems with Dynamic Orchestration

Peter Newman, Gerald Kotonya

Semantic Service Composition Framework for Multidomain Ubiquitous Computing Applications

Mohamed Hilia, Abdelghani Chibani, Karim Djouani, Yacine Amirat

#### Service Applications in Business and Society

An Adaptive Mediation Framework for Mobile P2P Social Content Sharing Chii Chang, Satish Srirama, Sea Ling

Socially-Enriched Semantic Mashup of Web APIs Jooik Jung, Kyong-Ho Lee

Application of Business-Driven Decision Making to RESTful Business Processes Qinghua Lu, Xiwei Xu, Vladimir Tosic, Liming Zhu

#### **Service Scaling and Cloud**

Sparse Functional Representation for Large Scale Service Clustering *Qi Yu* 

Management-based license discovery for the cloud Minkyong Kim, Han Chen, Jonathan Munson, Hui Lei

Updatable Process Views for User-centered Adaption of Large Process Models Jens Kolb, Klaus Kammerer, Manfred Reichert

#### Service Security, Privacy and Research and Personalization (Short Papers)

An Association Probability based Noise Generation Strategy for Privacy Protection in Cloud Computing

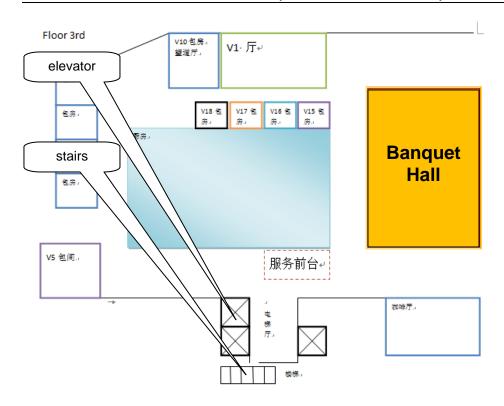
Gaofeng Zhang, Yun Yang, Xuyun Zhang, Chang Liu, Jinjun Chen

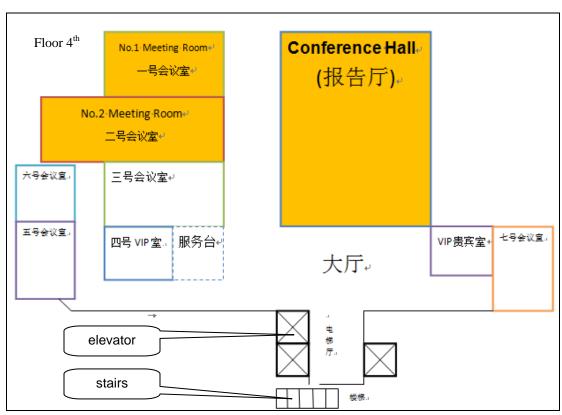
ARIMA Model-Based Web Services Trustworthiness Evaluation and Prediction Meng Li, Zhebang Hua, Junfeng Zhao, Yanzhen Zou, Bing Xie

Analyzing Coopetition Strategies of Services within Communities Babak Khosravifar, Mahsa Alishahi, Ehsan Khosrowshahi Asl, Jamal Bentahar, Rabeb Mizouni, Hadi Otrak

Trust-Based Service Discovery in Multi-Relation Social Networks Amine Louati, Joyce El Haddad, Suzanne Pinson

# FLOOR PLAN (CONFERENCE VENUE)





#### **SOCIAL EVENTS**

#### **Welcome Reception**

Date: Monday, November 12<sup>th</sup>

Time: 7:00pm

Meet at: Banquet Hall at Fuxuan Hotel

#### **Banquet**

Date: Wednesday, November 14<sup>th</sup>

Time: 7:00pm

Meet at: Banquet Hall at Crowne Plaza (Shanghai Fudan)

#### **TOURIST INFORMATION**

For all tourist information concerning sites of interest; visit the official webpage of Shanghai Govment;

Webpage: <a href="http://www.meet-in-shanghai.net/">http://www.meet-in-shanghai.net/</a>

#### TRANSPORTATION FROM CONFERENCE VENUE

#### **♦ To Pudong Airport**

- > Take a taxi (about 160 CNY, 70 minutes)
- ➤ Take a taxi to Longyang Road Station (about 55CNY, 45minutes). Then take Maglev Speed Train to Pudong Airport (50 CNY or 100 CNY (VIP), 8minutes)
- Walk to Wujiaochang Station (15-minutes-walk). Then, take a No.4 airport bus

#### **♦ To Honggiao Airport**

- Take a taxi (about 90 CNY, 40 minutes)
- Walk to Wujiaochang Station (12-minutes-walk). Then, take Metro Line 10 to Hongqiao airport (about 5 CNY, 1 hour)

#### ♦ To Hongqiao Railway Station

- > Take a taxi (about 90 CNY, 40 minutes)
- Walk to Wujiaochang Station (12-minutes-walk). Then, take Metro Line 10 to Hongqiao railway station (about 5 CNY, 1 hour)

#### ♦ To Shanghai Railway Station

- Take a taxi (about 35 CNY, 30 minutes).
- Walk to Fudan-University Station (5-minutes-walk). Then, take a No. 942 bus to Shanghai railway station (about 3 CNY, 60 minutes)

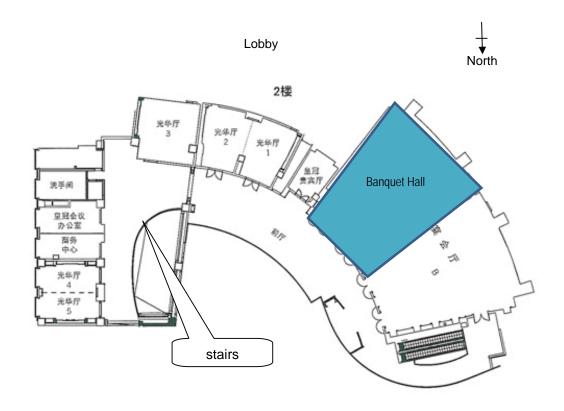
### **♦ To Shanghai South Railway Station**

- > Take a taxi (about 90 CNY, 45 minutes).
- Walk to Wujiaochang Station (12-minutes-walk). Take Metro Line 10 to Hongqiao railway station and exit at Hongqiao Road. Then, change Metro Line 3 to Shanghai South Railway Station (totally about 6 CNY, 1 hour)

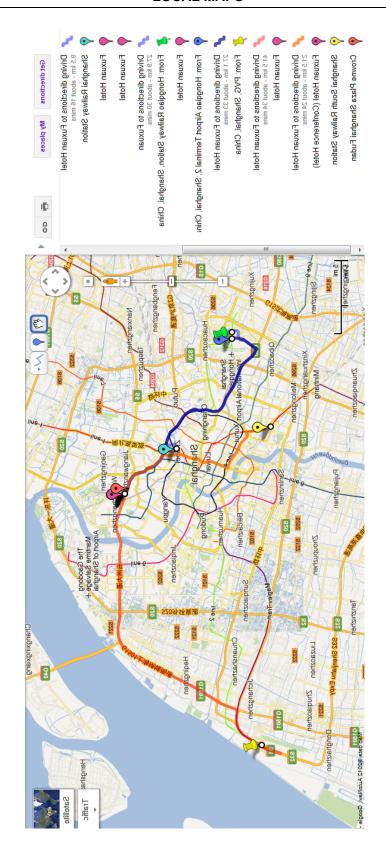
#### **USEFUL PHONE NUMBERS**

Country Code Prefix:	086
City Code Prefix:	021
Police:	110
Ambulance:	120
Local phone number inquiry:	114
Weather forecast:	12121
Shanghai tourism hotline:	962020
Flight inquiry:	96990
Reserve taxi:	62580000(English available)

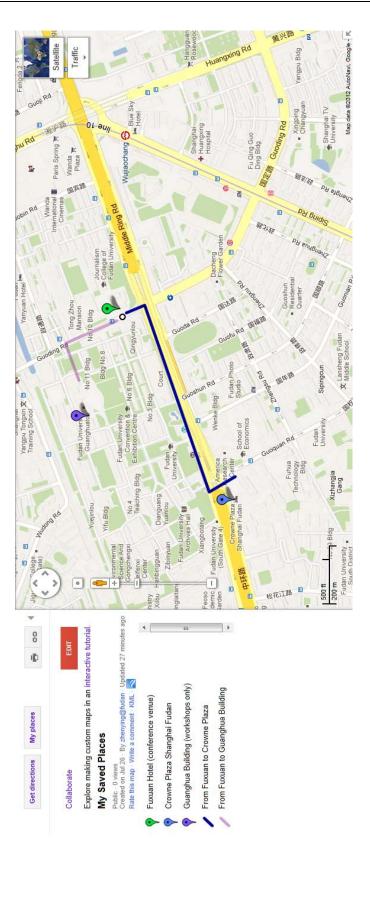
# FLOOR PLAN (CROWNE PLAZA)



#### **LOCAL MAPS**



### LOCAL MAPS



## **Organization**

#### **Steering Committee**

Boualem Benatallah, UNSW, Australia

Fabio Casati, University of Trento, Italy

Paco Curbera, IBM Research, USA

Asit Dan, IBM Research, USA

Bernd Krämer, FernUniversität in Hagen, Germany

Winfried Lamersdorf, University of Hamburg, Germany

Mike Papazoglou, Tilburg University, The Netherlands - acting Chair

Paolo Traverso, ITC-IRST, Italy

#### **Honorary Chair**

Junliang Chen, Beijing Post and Communication University, China

#### **General Chairs**

Jian Yang, Macquarie University, Australia Liang Zhang, Fudan University, China

#### **Advisory Committee**

Jifeng He, Eastern China Normal University, China

Jian Lv, Nanjing University, China Baile Shi, Fudan University, China

Zhaohui Wu, Zhejiang University, China

#### **Program Chairs**

Chengfei Liu, Swinburne University, Australia
Heiko Ludwig, IBM Almaden Research Center, USA
Farouk Toumani, Universit Blaise Pascal, France

#### **Workshop Chairs**

Aditya Ghose, University of Wollongong, Australia Huibiao Zhu, Eastern China Normal University, China

#### **Industry Chairs**

Yanbo Han, Chinese Academy of Sciences

Nanjangud C Narendra, IBM India Software Lab, Bangalore, India

Surya Nepal, ICT CSIRO, Australia

#### **Demonstration Chairs**

Alex Delis, University of Athens, Greece

Michael Q. Sheng, Adelaide University, Australia

#### **Panel Chairs**

Cesare Pautasso, University of Lugano, Switzerland

Thomas Sandholm, HP Labs, USA

#### **PHD Symposium Chairs**

Olivier Perrin, Nancy 2 University, France
Jianmin Wang, Tsinghua University, China
Yan Wang, Macquarie University, Australia

#### **Publicity Chairs**

Florian Daniel, University of Trento, Italy

Yunzhan Gong, Beijing Post and Communication University, China

Zaki Malik, Wayne State University, USA

#### **Local Organization Chairs**

Jian Cao, Shanghai Jiaotong University, China

Zhenying He, Fudan University, China Guohua Liu, Donghua Univesity, China

Budan Wu, Beijing Post and Communication University, China

### **Corporate Sponsor Chairs**

Genxing Yang, Shanghai Software Industry Association, China

Shiyong Zhang, Fudan University, China Yingsheng Li, Fudan University, China

### **Financial Chair**

Weiwei Sun, Fudan University, China

### **Publication Chair**

Qi Yu, Rochester Institute of Technology, USA

### **Web Chair**

Xiang Fu, Hofstra University, USA