

**The 2nd International Conference on Cloud and Green
Computing (CGC 2012)
The 2nd International Conference on Social Computing and Its
Applications (SCA2012)**

**November 1-3, 2012
Xiangtan, Hunan, China**

ADVANCE PROGRAM



Organizers and Sponsors

**Hunan University of Science and Technology, China
University of Technology Sydney, Australia
IEEE CS Technical Committee on Scalable Computing**



湖南科技大学
Hunan University of
Science and Technology



**UNIVERSITY OF
TECHNOLOGY SYDNEY**

知识处理与网络化制造湖南省普通高等学校重点实验室
Key Laboratory of Knowledge Processing and Networked Manufacturing College of Hunan Province

湖南科技大学计算机科学与技术省重点建设学科
The Construct Program of the Key Discipline in Hunan
Province (Discipline of Computer Science and Technology)

Program at a Glance

Wednesday, October 31, 2012	
9:00 – 22:30	Registration (Lobby in VIP Guest Building at Huadu International Hotel)
19:30-21:30	Welcome Reception (1 st Floor in VIP Guest Building)

Thursday, November 1, 2012				
9:00-18:00	Registration (Lobby in VIP Guest Building)			
Room	Multi-functional Hall in Business Chamber, 2nd Floor			
9:00 – 9:30	Opening Ceremony			
9:30 – 10:30	Keynote 1: Mobile Cloud and Crowd Computing and Sensing Speaker: Prof. Ivan Stojmenovic Chair: A/Prof. Jinjun Chen			
10:30 – 10:50	Tea Break			
10:50 – 11:50	Keynote 2: Performance Consideration of Virtualized System Speaker: Prof. Hai Jin Chair: Prof. Xiaoqing (Frank) Liu			
12:00 – 14:00	Buffet Lunch (1 st Floor in VIP Guest Building)			
Room in Conference Center	Huadu Hall 3 rd Floor	Roma Hall 2 nd Floor	Berlin Hall 2 nd Floor	Paris Hall 2 nd Floor
14:00 – 16:00	Session 1A CGC2012	Session 1B SCA2012	Session 1C BigDataMR2012	Session 1D SNSDB2012
16:00 – 16:20	Tea Break			
Room in Conference Center	Huadu Hall 3 rd Floor	Roma Hall 2 nd Floor	Berlin Hall 2 nd Floor	Paris Hall 2 nd Floor
16:20 – 18:20	Session 2A CGC2012	Session 2B SCA2012	Session 2C CGC202	Session 2D BigDataMR2012 /SNSDB2012
19:00	Dinner (1 st Floor in Huadu Restaurant)			

Friday, November 2, 2012

Room	Huadu Hall in Conference Center, 3 rd Floor			
8:30 – 9:30	Keynote 3: Towards Connecting Big Data with Many People Speaker: Prof. Jian Pei Chair: Prof. Ivan Stojmenovic			
9:30 – 10:30	Keynote 4: Mobility Management for Satellite and Terrestrial Networks: Architecture, Performance and Energy Considerations Speaker: Prof. Mohammed Atiquzzaman Chair: Prof. Hai Jin			
10:30 – 10:50	Tea Break			
10:50 – 12:20	Panel: Cloud Computing and Big Data Panelist: Prof. Ivan Stojmenovic/Hai Jin/ Jian Pei / Mohammed Atiquzzaman Coordinator: A/Prof. Jinjun Chen			
12:20 – 14:00	Buffet Lunch (1 st Floor in VIP Guest Building)			
Room in Conference Center	Huadu Hall 3 rd Floor	Roma Hall 2 nd Floor	Berlin Hall 2 nd Floor	Paris Hall 2 nd Floor
14:00 – 16:00	Session 3A CGC2012	Session 3B CGC2012	Session 3C SCA2012	Session 3D SCA2012
16:00 – 16:20	Tea Break			
Room in Conference Center	Huadu Hall 3 rd Floor	Roma Hall 2 nd Floor	Berlin Hall 2 nd Floor	Paris Hall 2 nd Floor
16:20 – 18:20	Session 4A CGC2012	Session 4B CGC2012	Session 4C SCA2012	Session 4D SCA2012
19:00-	Banquet (1 st Floor in Huadu Restaurant)			

Saturday, November 3, 2012

Room	Huadu Hall in Conference Center, 3rd Floor			
8:30 – 9:30	Keynote 5: From Social Computing to Social Manufacturing: A New Frontier in Cyber-Physical-Social Space Speaker: Prof. Feiyue Wang Chair: Prof. Mohammed Atiquzzaman			
9:30-10:30	Keynote 6: Social Computing in the e-Era Speaker: Prof. Irwin King Chair: Prof. Jian Cao			
10:30-10:50	Tea Break			
10:50 – 11:50	Keynote 7: Online Intelligent Argumentation Systems: Issues, Challenges, Design, and Applications Speaker: Prof. Xiaoqing (Frank) Liu Chair: Prof. Jianxun Liu			
12:00 – 13:30	Buffet Lunch (1 st Floor in VIP Guest Building)			
Room in Conference Center	Huadu Hall 3rd Floor	Roma Hall 2nd Floor	Berlin Hall 2nd Floor	Paris Hall 2nd Floor
13:30 – 16:00	Session 5A CGC2012	Session 5B SNAIDM2012	Session 5C SCA2012	Session 5D WMSC2012/ WW2012/ PriSecCSN2012
16:00 -	No planned activities			

CGC2012/SCA2012 Keynote Speakers



Professor Fei-Yue Wang

Institute of Automation,
Chinese Academy of Sciences,
Beijing, China

Title: From Social Computing to Social Manufacturing: A New Frontier in Cyber-Physical-Social Space

Abstract:

To be announced.

Professor Fei-Yue Wang's Bio:

Fei-Yue Wang received his Ph.D. in Computer and Systems Engineering from Rensselaer Polytechnic Institute, Troy, New York in 1990. He joined the University of Arizona in 1990 and became a Professor and Director of the Robotics and Automation Lab and Program in Advanced Research for Complex Systems. In 1999, he found the Intelligent Control and Systems Engineering Center at the Chinese Academy of Sciences (CAS), Beijing, China, under the support of the Outstanding Oversea Chinese Talents Program, and in 2002, was appointed as the Director of the CAS Key Lab for Complex Systems and Intelligence Science. From 2006 to 2010, he was Vice President for research, education, and academic exchanges at the Institute of Automation, Chinese Academy of Sciences. Since 2005, he is the Dean of the School of Software Engineering, Xian Jiaotong University. In 2011, he became the Director of the State Key Laboratory of Management and Control for Complex Systems. Dr. Wang was the Founding Editor-in-Chief of the International Journal of Intelligent Control and Systems from 1995 to 2000, the Series on Intelligent Control and Intelligent Automation from 1996 to 2004, and IEEE Intelligent Transportation Systems, and the EiC of IEEE Intelligent Systems and IEEE Trans on ITS from 2009 to 2012. Since 1997, he has served as General or Program Chair of more than 20 IEEE, INFORMS, ACM, ASME conferences. He was the President of IEEE ITS Society from 2005 to 2007, Chinese Association for Science and Technology (CAST, USA) in 2005, and the American Zhu Kezhen Education Foundation from 2007-2008. Currently, he is the Vice President and Secretary General of Chinese Association of Automation. Dr. Wang is member of Sigma Xi and an elected Fellow of IEEE, INCOSE, IFAC, ASME, and AAAS. In 2007, he received the 2nd Class National Prize in Natural

Sciences of China and awarded the Outstanding Scientist by ACM for his work in intelligent control and social computing. He received IEEE ITS Outstanding Application and Research Awards in 2009 and 2011, respectively.



Professor Ivan Stojmenovic

School of Electrical Engineering and Computer Science,
University of Ottawa,
Ottawa Ontario K1N 6N5, Canada
<http://www.site.uottawa.ca/~ivan>

Title: Mobile Cloud and Crowd Computing and Sensing

Abstract:

Mobile devices (smart phones, tablets, laptops, embedded boards, robots) can serve as terminals for cloud computing services over intelligent network. Mobile cloud has emerged as a new cloud computing platform that ‘puts cloud into a pocket’. Important issues include optimizing the scheduling and transport schemes, access management, and application optimization, for mobile devices to achieve energy saving. This talk will first introduce the development of mobile cloud computing and describe some applications involving multimedia, vision/recognition, graphics, gaming, text processing. It will present the transmission, computation (e.g. task outsourcing), and sensing (e.g. location based services) challenges and solution approaches of green computing in mobile cloud. ‘Crowd computing’ combines mobile devices and social interactions to achieve large-scale distributed computation. Examples include task farming and social network creation and cooperation. Mobile devices are being equipped with various sensors to provide input for participatory and opportunistic crowd-sourced sensing. Particular emerging concepts are ‘vehicular cloud’ and ‘vehicular crowd’, with applications such as cloud server, vehicular data center, and congestion mitigation.

Professor Ivan Stojmenovic's Bio:

Prof. Ivan Stojmenovic received his Ph.D. degree in mathematics in 1985. He held regular or visiting positions in Serbia (Institute of Mathematics, University of Novi Sad, 1980-1987), Japan (Electrotechnical Laboratory, Tsukuba, 1985/6), USA (Washington State University, Pullman, WA, and University of Miami, FL, 1987/88), France (Amiens 1998, Lille 2002-2007, Paris 2008), Mexico (DISCA,

IIMAS, Universidad Nacional Autonoma de Mexico, 2000/02), Spain (Murcia, 2005), UK (University of Birmingham, 2007/08), Hong Kong (May 2009), Brazil (Sao Carlos, August 2009), Canada (SITE, University of Ottawa, since 1988).

Stojmenovic published >250 different papers in referred journals and conferences; >90 of them are in journals with an ISI impact factor, >20 are in IEEE or ACM journals. His most significant publications can be seen at www.site.uottawa.ca/~ivan. He co-authored over 30 book chapters, mostly very recent.

He collaborated with about 100 co-authors with Ph.D. and a number of their graduate students from 24 different countries. He (co)supervised >50 completed Ph.D. and master theses, and published over 120 joint articles with supervised students. He also published articles with 27 graduate students outside of their theses, and 4 undergraduate students. His current research interests are mainly in wireless ad hoc, sensor and cellular networks. His research interests also include parallel computing, multiple-valued logic, evolutionary computing, neural networks, combinatorial algorithms, computational geometry, graph theory, computational chemistry, image processing, programming languages, and computer science education.

He is current editor-in-chief of IEEE Transactions on Parallel and Distributed Systems.



Professor Hai Jin

School of Computer Science and Technology,
Huazhong University of Science and Technology,
Wuhan, China

Title: Performance Consideration of Virtualized System

Abstract:

Virtualization is a rapidly evolving technology that provides a range of benefits to computing systems, such as improved resource utilization and management, application isolation and portability, and system reliability. Among these features, live migration, resources management (including vCPU scheduling and I/O management) are core functions. Live migration of virtual machine (VM) provides

a significant benefit for virtual server mobility without disrupting service. It has become an extremely powerful tool for system management in a variety of key scenarios, such as VM load balancing, fault tolerance, power management and other applications. Experimentations and traces show that the performance of live migration is not good enough for different applications. Of course, based on the virtualization architecture management schemes for CPU and I/O resources also need to be reconsidered when supporting different applications with different workload.

In this talk, some typical issues in virtualized system will be discussed. Firstly, to take into account the migration overhead in migration decision making, we thoroughly analyze the key parameters that affect the migration cost from theory to practice, and construct two application-oblivious models for the cost prediction by using learned knowledge about the workloads at the hypervisor (also called VMM) level. We evaluate the models using five representative workloads on a Xen virtualized environment. Based on the model, we have proposed two live migration schemes for different scenarios: a novel approach that adopts check pointing/recovery and trace/replay technology to provide fast, transparent VM migration for applications with high reliability, and a memory-compression-based VM migration system for normal applications. Secondly, the asynchronous-synchronous disk I/O model in a typical virtualized system exhibits several problems. For example, when the frontend fails abruptly, the unsaved data in the front end's cache will be lost. To address the problems, we introduce a new I/O model. In this model, rather than performing the asynchronous-synchronous operations for an asynchronous I/O write request, the frontend file system uses synchronous operations to deal with the I/O request and the backend file system performs asynchronous operations to write the data to the hard disk. A prototype system called HypeGear is implemented on the Xen hypervisor. Thirdly, VMM schedulers have focused on fairly sharing the processor resources among domains, rarely consider VCPUs' behaviors. However, this can result in poor application performance to overcommitted domains if there are concurrent programs hosted in them. We review the properties of both Xen's Credit and SEDF schedulers, and show how these schedulers may seriously impact the performance of the communication-intensive and I/O-intensive concurrent applications in overcommitted domains. A novel approach, that dynamically scales the context switching-frequency by selecting variable time slices according to VCPUs' behaviors, is then proposed to improve the Credit scheduler more adaptive for concurrent applications.

Professor Hai Jin's Bio:

Hai Jin is a Cheung Kung Scholars Chair Professor of computer science and engineering at the Huazhong University of Science and Technology (HUST) in China. He is now Dean of the School of Computer Science and Technology at HUST. Jin received his PhD in computer engineering from HUST in 1994. In 1996,

he was awarded a German Academic Exchange Service fellowship to visit the Technical University of Chemnitz in Germany. Jin worked at The University of Hong Kong between 1998 and 2000, and as a visiting scholar at the University of Southern California between 1999 and 2000. He was awarded Excellent Youth Award from the National Science Foundation of China in 2001. Jin is the chief scientist of ChinaGrid, the largest grid computing project in China, and the chief scientist of National 973 Basic Research Program Project of Virtualization Technology of Computing System.

Jin is a senior member of the IEEE and a member of the ACM. Jin is the member of Grid Forum Steering Group (GFSG). He has co-authored 15 books and published over 400 research papers. His research interests include computer architecture, virtualization technology, cluster computing and grid computing, peer-to-peer computing, network storage, and network security.

Jin is the steering committee chair of International Conference on Grid and Pervasive Computing (GPC), Asia-Pacific Services Computing Conference (APSCC), International Conference on Frontier of Computer Science and Technology (FCST), and Annual ChinaGrid Conference. Jin is a member of the steering committee of the IEEE/ACM International Symposium on Cluster Computing and the Grid (CCGrid), the IFIP International Conference on Network and Parallel Computing (NPC), and the International Conference on Grid and Cooperative Computing (GCC), International Conference on Autonomic and Trusted Computing (ATC), International Conference on Ubiquitous Intelligence and Computing (UIC).



Professor Jian Pei

School of Computing Science,
Simon Fraser University,
University Drive, Burnaby, BC Canada

Title: Towards Connecting Big Data with Many People

Abstract:

Big data, which refers to the data sets that are too complicated and too big to be handled using the existing database management tools, is emerging in many important applications, such as Internet search, business informatics, social networks, social media, genomics, and meteorology. Big data presents a grand challenge for database and data analytics research. In this talk, I review some of

the exciting research in my group under the central theme of connecting big data with many people in various ways. Particularly, I will show case our recent progress in user preference understanding, context-aware, on-demand data mining using crowd intelligence, summarization and explorative analysis of large datasets, and privacy preserving data sharing and analysis.

Professor Jian Pei's Bio:

Jian Pei is a Professor at the School of Computing Science, Simon Fraser University, Canada. He is interested in researching, developing, and deploying effective and efficient data analysis techniques for novel data intensive applications, including data mining, Web search, data warehousing and online analytic processing, database systems, and their applications in social networks and media, health-informatics, business and bioinformatics. His research has been extensively supported in part by governmental funding agencies and industry partners. He is also active in developing industry relations and collaboration, transferring technologies developed in his group to industry applications, and developing proof-of-concept prototypes. Since 2000, he has published 1 textbook, 2 monographs and over 170 research papers in refereed journals and conferences, which have been cited thousands of times. He has served in the organization committees and the program committees of over 160 international conferences and workshops. He is the associate editor-in-chief (Named new EIC) of IEEE Transactions of Knowledge and Data Engineering (TKDE), and an associate editor or editorial board member of the premier academic journals in his fields, including ACM Transactions on Knowledge Discovery from Data (TKDD), Data Mining and Knowledge Discovery, Knowledge and Information Systems, Statistical Analysis and Data Mining, Intelligent Data Analysis, and Journal of Computer Science and Technology. He is an ACM Distinguished Speaker, and a senior member of ACM and IEEE. He is the recipient of several prestigious awards.



Mohammed Atiquzzaman, Ph.D.

Edith J. Kinney Gaylord Presidential Professor,

School of Computer Science,
University of Oklahoma,
Norman, OK 73019

Email: atiq@ou.edu

Title: Mobility Management for Satellite and Terrestrial Networks: Architecture, Performance and Energy Considerations

Abstract:

Previous work on mobility management in data networks have mainly dealt with solutions regarding mobility of individual hosts. Various network layer and transport layer solutions have been developed. However, recently there has been strong interest in finding solutions for networks in motion, such as networks in an aircraft, train or ship. As they move, rather than handing off individual hosts on such a network, it is more efficient to handover the networks between access points. This results in the handoff being transparent to the hosts and less control traffic in the resource challenged wireless networks. The talk will provide an overview of the network layer based solution being developed by the Internet Engineering Task Force and compare with the end-to-end based solution (SINEMO) developed at University of Oklahoma in conjunction with the National Aeronautics and Space Administration for networks in motion. Issues related to architecture, performance and energy consumption of mobility protocols and future directions for research will be described. The application of networks in motion will be illustrated for both terrestrial and space environment.

Professor Mohammed Atiquzzaman's Bio:

Mohammed Atiquzzaman (Senior Member, IEEE) obtained his M.S. and Ph.D. in Electrical Engineering and Electronics from the University of Manchester (UK) in 1984 and 1987, respectively. He currently holds the Edith J Kinney Gaylord Presidential professorship in the School of Computer Science at the University of Oklahoma.

Dr. Atiquzzaman is the Editor-in-Chief of Journal of Networks and Computer Applications, and serves/served on the editorial boards of many journals including IEEE Communications Magazine, Real Time Imaging Journal, International Journal of Communication Networks and Distributed Systems and Journal of Sensor Networks and International Journal of Communication Systems. He co-chaired the IEEE High Performance Switching and Routing Symposium (2003, 2011), several IEEE Globecom and ICC symposiums (2010, 2009, 2007, 2006), and the SPIE Quality of Service over Next Generation Data Networks conferences (2001, 2002, 2003). He was the panels co-chair of INFOCOM'05, and is/has been in the program committee of many conferences such as INFOCOM, Globecom, ICCCN, Local Computer Networks, and serves on the review panels at the National Science Foundation. He is the current Vice Chair of IEEE Communication Society Technical Committee on Communications Switching and Routing.

Dr. Atiquzzaman received IEEE Communication Society's Fred W. Ellersick Prize, and NASA Group Achievement Award for "outstanding work to further NASA Glenn Research Center's effort in the area of Advanced Communications/Air Traffic Management's Fiber Optic Signal Distribution for Aeronautical Communications" project. He is the co-author of the book "Performance of TCP/IP

over ATM networks” and has over 250 refereed publications, most of which can be accessed at www.cs.ou.edu/~atiq.

His current research interests are in areas of transport protocols, wireless and mobile networks, ad hoc networks, satellite networks, power-aware networking, and optical communications. His research has been funded by National Science Foundation (NSF), National Aeronautics and Space Administration (NASA), and U.S. Air Force, Cisco and Honeywell.



Professor Irwin King,

Department of Computer Science and Engineering,
The Chinese University of Hong Kong,
Shatin, New Territories, Hong Kong

Title: Social Computing in the e-Era

Abstract:

With the pervasive electronic access readily available, the e-Era has brought on new paradigms in e-government, e-commerce, e-health, e-learning, etc. In recent years, the emergence of social computing has further expanded this e-paradigm with new approaches and techniques on how we process social media data. It is not difficult to see how social computing as a natural extension that builds on the e-paradigm scaffolding that promotes social interactivity. However, what does this new social interactivity bring us? The talk outlines some novel research work and applications in social computing in the e-Era. It will also reflect on some obvious and also subtle aspects of social computing with a few of our work that further illustrate how social media influence our everyday life and impact our society.

Professor Irwin King’s Bio:

Prof. King's research interests include machine learning, social computing, web intelligence, data mining, and multimedia information processing. In these research areas, he has over 210 technical publications in journals and conferences. In addition, he has contributed over 30 book chapters and edited volumes. Moreover, Prof. King has over 30 research and applied grants. One notable patented system he has developed is the VeriGuide System, which detects similar

sentences and performs readability analysis of text-based documents in both English and in Chinese to promote academic integrity and honesty.

Prof. King is the Book Series Editor for “Social Media and Social Computing” with Taylor and Francis (CRC Press). He is also an Associate Editor of the ACM Transactions on Knowledge Discovery from Data (ACM TKDD) and a former Associate Editor of the IEEE Transactions on Neural Networks (TNN) and IEEE Computational Intelligence Magazine (CIM). He is a member of the Editorial Board and Special Issue Guest Editor of several international journals. He is a senior member of IEEE and a member of ACM, International Neural Network Society (INNS), and Asian Pacific Neural Network Assembly (APNNA). Currently, he is serving the Neural Network Technical Committee (NNTC) and the Data Mining Technical Committee under the IEEE Computational Intelligence Society (formerly the IEEE Neural Network Society). He is also a member of the Board of Governors of INNS and a Vice-President and Governing Board Member of APNNA. He also serves INNS as the Vice-President for Membership in the Board of Governors.

He is Professor at the Department of Computer Science and Engineering, The Chinese University of Hong Kong. He received his B.Sc. degree in Engineering and Applied Science from California Institute of Technology (Caltech), Pasadena and his M.Sc. and Ph.D. degree in Computer Science from the University of Southern California (USC), Los Angeles. Recently he was on leave to be with AT&T Labs Research, San Francisco and also as a Visiting Professor at UC Berkeley.



Professor Xiaoqing (Frank) Liu

Department of Computer Science,
Missouri University of Science and Technology,
Rolla, USA

Title: Online Intelligent Argumentation Systems: Issues, Challenges, Design, and Applications

Abstract:

Argumentation is an important and critical process in addressing social, financial, and business challenges. On-line argumentation systems are a significant type of social computing systems. They are very promising and show significant potentials in enabling wide participation in decision making process, decision rationale capturing, conflict resolution, and public policy development. In this

talk, I will first present research issues, challenges, capabilities, applications, and benefits of on-line intelligent argumentation systems. I will then discuss design and case studies of our on-line intelligent argumentation system. Our intelligent argumentation and collaborative decision support project website is currently ranked as a top site by the GOOGLE search engine under search criteria “argumentation collaborative decision making software” out of millions of search results. Finally, I will focus on polarization detection and analysis in on-line argumentation. In an argumentation process, participants tend to form groups, called polarization groups based on their opinions and exchange of arguments. Identification of argumentation polarization groups and their leaders becomes an important challenge which has not been addressed adequately in the past. We will present a framework for detecting polarization groups in an argumentation process using a clustering algorithm. It is evaluated using an online argumentation data set produced using our system. The experimental results show that the framework works effectively for detection and analysis of on-line argumentation polarization. The argumentation polarization assessment provides decision makers with more information about polarization groups and their opinions towards given issues and it helps them to analyze post-decision impacts on individual polarization groups.

Professor Xiaoqing (Frank) Liu’s Bio:

Xiaoqing (Frank) Liu is currently a professor and graduate coordinator in the computer science department at the Missouri University of Science and Technology. He is also a director of the McDonnell Douglass Foundation software engineering laboratory there. In addition, he is a vice chair of information technology and computing committee at the Missouri University of Science and Technology. He is entitled the Chair Professor of Lotus Scholar Plan of Hunan Province in Hunan University of Science and Technology. He has been working on software engineering, social computing, service computing, requirements engineering, argumentation and collaborative systems, and software engineering applications in power systems and advanced manufacturing since 1985. He served as a program committee chair of the 2008 IEEE International Conference on Computer Software and Applications and program committee chairs of the 2011 and 2012 International Conference on Collaboration Technologies and Systems. He has published more than 110 journal and conference papers and book chapters in the above areas. He participates in twenty-six funded research projects as a principal investigator or co-principal investigator sponsored by the National Science Foundation, Sandia National Laboratory, U.S. Army, U.S. Air Force, Boeing Co., Toshiba Co., Spirit Aerospace, University of Missouri Research Board, and other reputable institutions.

The 2nd International Conference on Cloud and Green Computing (CGC 2012)

Session 1A: CGC2012 – Cloud Schedule and Optimization

Chair: Prof. Wanchun Dou, Nanjing University, China

- **Optimizing Xen Hypervisor by Using Lock-aware Scheduling**
Alin Zhong, Hai Jin, Song Wu, Xuanhua Shi and Wei Gen
- **Configuration and Optimization of Virtual Business in Cloud Computing Environment**
Hongjun Sun, Shuangxi Huang, Yushun Fan and Wei Su
- **A QoS-Aware Service Optimization Method Based on History Records and Clustering**
Shunmei Meng, Zhenxing Liu, Wanchun Dou
- **Spot-on for timed instances: striking a balance between spot and on-demand instances**
Thomas Knauth and Christof Fetzer
- **Vertical scaling for prioritized VMs provisioning**
Lenar Yazdanov and Christof Fetzer
- **Reducing the number of miscreant tasks executions in a multi-use cluster**
A. Stephen McGough, Matthew Forshaw, Clive Gerrard and Stuart Wheeler

Session 2A: CGC2012 - Cloud Schedule and Optimization

Chair: Dr. Kaijun Ren, National Defense University of Technology, China

- **Multi-Attribute Combinatorial Marketplaces for Cloud Resource Trading**
Ahmed Salim Alrawahi, Kevin Lee
- **Symbiotic Scheduling for Virtual Machines on SMT Processors**
Kefeng Deng, Kaijun Ren and Junqiang Song
- **Preprocessing scheme of intelligent assembly for a high performance VLIW DSP**
Yonghua Hu, Shuming Chen and Jie Huang
- **A Multi-step-ahead CPU Load Prediction Approach in Distributed System**
Dingyu Yang, Jian Cao, Cheng Yu, Jing Xiao
- **Research on Code Migration Framework for Mobile Computing**
Long Cheng, Hongming Cai and Lihong Jiang

- **A Proactive Fault Tolerance Approach to High Performance Computing (HPC) in the Cloud**

Ifeanyi P. Egwutuoha, Shiping Chen, David Levy, Bran Selic and Rafael Calvo

Session 2C: CGC2012 - Cloud Service

Chair:

- **A General Approach to Service Deployment in Cloud Environments**
Wubin Li, Petter Svärd, Johan Tordsson and Erik Elmroth
- **An Approach to History Based Automatic Service Composition**
Xingyu Zeng, Xinhuai Tang and Delai Chen
- **Scientific-Workflow-Management-as-a-Service in the Cloud**
Yong Zhao, Youfu Li, Wenhong Tian and Ruini Xue
- **A Service Provisioning Strategy Based on SPEA2 for SaaS Applications in Cloud**
Tiantian Zhang, Yuliang Shi, Meng Xu and Lizhen Cui
- **Memcache and MongoDB based GIS Web Service**
Jinghong Yang; Wuyang Ping; Lin Liu; Qiping Hu
- **Data Sharing in Data-Centric Multi-Tenant Software as a Service**
Usman Aslam and Hamid Mukhtar

Session 3A: CGC2012 - Cloud Security

Chair: Guojun Wang, Central South University, China

- **Towards Privacy Preserving Mining over Distributed Cloud Databases**
Ayad Ibrahim, Hai Jin, Ali A. Yassin and Deqing Zou
- **Re-encryption Optimization in CP-ABE based Cryptographic Cloud Storage**
Yong Cheng, Jiangchun Ren, Zhiying Wang, Songzhu Mei, Jie Zhou
- **Anonymous Password Authentication Scheme by Using Digital Signature and Fingerprint in Cloud Computing**
Ali A. Yassin, Hai Jin, Ayad Ibrahim, Deqing Zou
- **Trust Evaluation Model against Insider Attack in Wireless Sensor Networks**
Yifan Lu, Kai Lin, Keqiu Li
- **Key Research Issues for Privacy Protection and Preservation in Cloud Computing**

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

- **Dynamic Grouping Strategy in Cloud Computing**

Qin Liu, Yuhong Guo, Jie Wu and Guojun Wang

Session 3B: CGC2012 - Cloud Security and Schedule

Chair:

- **Attributes Union in CP-ABE Algorithm for Large Universe Cryptographic Access Control**

Yong Cheng, Jiangchun Ren, Zhiying Wang, Songzhu Mei, Jie Zhou

- **Privacy-preserving Layer over MapReduce on Cloud**

Xuyun Zhang, Chang Liu, Surya Nepal, Wanchun Dou, Jinjun Chen

- **Risk-aware Checkpoint Selection in Cloud-based Scientific Workflow**

Mingzhong Wang, Liehuang Zhu and Jinjun Chen

- **A Monitoring Mechanism for Storage Clouds**

Spyridon V. Gogouvitis, Vassileios Alexandrou, Nikoletta Mavrogeorgi, Stefanos Koutsoutos, Dimosthenis Kyriazis, Theodora Varvarigou

- **A QoS-aware Dynamic Data Replica Deletion Strategy for Distributed Storage Systems under Cloud Computing Environments**

LIAO Bin, YU Jiong, SUN Hua, NIAN Mei

- **Social Networking for Sharing Cloud Resources**

Zahra Ali, Raihanur Rasool, Peter Bloodsworth

Session 4A: CGC2012 - Cloud Network and Applications

Chair: Xin Wang, Fudan University, China

- **An Ad-hoc Distributed Reasoning Scheme for Content Centric Networking**

Aiping Yi, Junnian Wang and Zhuhua Liao

- **An Efficient Scheme for Minimum-Latency Data Aggregation in Two- and Three-Dimensional Wireless Sensor Networks**

Hongju Cheng, Feifei Li, Laurence T. Yang, Naixue Xiong

- **Implementing Smith-Waterman Algorithm with Two-dimensional Cache on GPUs**

Xiaowen Feng, Hai Jin, Ran Zheng, Zhiyuan Shao and Lei Zhu

- **Recommending Pick-up Points for Taxi-drivers based on Spatio-temporal Clustering**

Mingyue Zhang, Jianxun Liu, Yizhi Liu, Zhenyang Hu, Liang Yi

- **Rules and Implementation for Generating Ontology from Relational Database**

Yutao Ren, Lihong Jiang, Fenglin Bu and Hongming Cai

Session 4B: CGC2012 - Cloud Applications

Chair: Yan Yu, Sun Yat-Sen University, China

- **E-Health Framework Based on Autonomic Cloud Computing**

Goran Martinovic and Bruno Zoric

- **Parallel Text Clustering Based on MapReduce**

Cao Zewen and Zhou Yao

- **The Parallel Algorithm of the Non-Differentiable Maximum Likelihood Ensemble Filter on Cloud Environments**

Wangyi Han, Junqiang Song, Xiaoqun Cao

- **Elastic JADE**

Umar Siddiqui, Ghalib Ahmed Tahir, Attiq ur rehman, Zahra Ali, Raihan ur Rasool, Peter Bloodsworth

- **SEJ: An Even Approach to Multiway Theta-Joins using MapReduce**

Changchun Zhang, Jing Li, Lei Wu, Meiyang Lin and Weiqing Liu

Session 5A: CGC2012 - Green Computing

Chair:

- **An Energy Model for Applications Running on Multicore Systems**

Delbert Bonner and Akbar Siami Namin

- **Green Queue: Customized Large-scale Clock Frequency Scaling**

Ananta Tiwari, Michael Laurenzano, Joshua Peraza, Laura Carrington and Allan Snaveley

- **Energy Efficient Computing through Productivity-Aware Frequency Scaling**

Lesandro Ponciano, Andrey Brito, Livia Sampai, Francisco Brasileiro

- **CompatibleOne: Designing an Energy Efficient Open Source Cloud Broker**

Julien Carpentier, Jean-Patrick Gelas, Laurent Lefevre, Maxime Morel, Olivier Mornard, Jean-Pierre Laisne

- **Energy Footprint of Advanced Dense Numerical Linear Algebra using Tile Algorithms on Multicore Architectures**

Jack Dongarra, Hatem Ltaief, Piotr Luszczek and Vincent M. Weaver

- **Minimizing the Energy Cost of Servers in Data Center Networks**

Jun Wu, Qin Jia, Jin Zhao and Xin Wang

The 2nd International Conference on Social Computing and Its Applications
(SCA2012)

Session 1B: SCA2012 –Microblog Analysis and Processing

Chair:

- **Microblogging Sentiment Analysis Using Emotional Vector**
Lumin Zhang, Yan Jia, Bin Zhou and Yi Han
- **Using Social Intelligence for New Event Detection in Microblog Stream**
Lei Deng, Zhaoyun Ding, Bingying Xu, Bin Zhou, Peng Zou
- **Real-time Search over a Microblogging System**
Ming Gao, Cheqing Jin, Weining Qian, Xueqing Gong
- **Discovering Communities with Self-adaptive k Clustering in Microblog Data**
Ting Huang, Dunlu Peng, Lidong Cao
- **Extraction And Analysis Of Chinese Microblog Topics From Sina**
Lin Li and Xing Chen
- **MobiMsg: A Resource-Efficient Location-Based Mobile Instant Messaging System**
Sheng Zhao, Feng Xia, Zhen Chen, Zhen Li and Jianhua Ma

Session 2B: SCA2012 - Fundamentals of Social Computing

Chair:

- **ASML: Artificial Society Modelling Language for ACP Approach Based-on Organization Metaphors**
Mingsheng Tang, Xinjun Mao, Huiping Zhou, Xueyan Tan
- **Foundations of Trust: Contextualising Trust in Social Clouds**
Simon Caton, Christoph Dukat, Tilo Grenz, Christian Haas, Michaela Pfadenhauer and Christof Weinhardt
- **Modeling Influence in Online Multi-Party Discourse**
Samira Shaikh, Tomek Strzalkowski, Jenny Stromer-Galley, George Aaron Broadwell, Sarah Taylor, Ting Liu, Veena Ravishankar, Xiaoi Ren, Umit Boz
- **Dynamic Media Distribution in Ad-Hoc Social Networks**
Juwel Rana, Johan Kristiansson and Kare Synnes
- **A Network-Flow Based Influence Propagation Model for Social Networks**
Wookey Lee, Carson Kai-Sang Leung, Justin Jongsu Song, Chris Soo-Hyun Eom

- **Determining the number of clusters in co-authorship networks using social network theory**

Qinxue Meng, Paul J. Kennedy

Session 3C: SCA2012 - Ranking and Recommendation

Chair:

- **Academic Recommendation on Graph with Dynamic Transfer Chain**
Jia Zhou, Tiejian Luo, Guandong Xu
- **Web Service Ranking based on Context**
Rong Zhang, Koji Zettsu, Yutaka Kidawara, Yasushi Kiyoki
- **Group Division for Recommendation in Tag-based Systems**
Rong Pan, Guandong Xu, Peter Dolog, Yu Zong
- **Mashup Service Classification and Recommendation based on Similarity Computing**
Guangrong Wang, Jianxun Liu, Buqing Cao and Mingdong Tang
- **A Ranked-based Learning Approach To Automated Essay Scoring**
Hongbo Chen, Ben He, Tiejian Luo and Baobin Li
- **Shortest Path Based Potential Common Friend Recommendation in Social Networks**
Xiuxia Tian, Yangli Song, Xiaoling Wang, Xueqing Gong

Session 3D: SCA2012 - Social Network Analysis and Mining

Chair:

- **A Practical Method for Detecting Community Structures in Decentralized and Unstructured P2P Networks**
Liu Meng, Liu ZhenXing, Dou WanChun
- **A Method for Extracting Influential Nodes while Considering the Development of Social Networks**
Masaki Oono
- **An Enhanced Community Detection Method Based on Neighborhood Similarity**
Zhang Shaoqian, Liu Zhenxing, Dou Wanchun
- **Finding Popular Friends in Social Networks**
Fan Jiang, Carson Kai-Sang Leung, Syed K. Tanbeer
- **Who are more Influential Spreaders? Users with Broader Social Circle or with more Friends?**

Senzhang Wang, Fang Wang, Zhoujun Li and Xiaoming Zhang

- **Web Page Recognition Algorithm Based on Link Analysis in Theme Search Engine**

Zude Chen, Jianxun Liu, Haijun Zhai, Lei Jiang and Buqing Cao

Session 4C: SCA2012 - Ranking and Recommendation

Chair:

- **Measuring popularity in social network groups**
TâniaLeitão, Carmen Morgado and Jose C. Cunha
- **A tool for improving personalization and information sharing using implicit groups**
Miguel Rangel Pais, Carmen Morgado and Jose C. Cunha
- **Book Recommendation Based On Joint Multi-Relational Model**
Qiuzi Shangguan, Liang Hu, Jian Cao and Guandong Xu
- **Frequency and link analysis of online novels toward social contents ranking**
Eisuke Ito and Kazunori Shimizu
- **InfluenceRank: An Efficient Social Influence Measurement for Millions of Users in Microblog**
Wenlong Chen, Shaoyin Cheng, Xing He and Fan Jiang
- **Customer Preference Analysis Based on SNS Data**
J. S. Kim, M. H. Yang, Y. J. Hwang, S. H. Jeon, K. Y. Kim, I. S. Jung, C. H. Choi, W. S. Cho, J. H. Na

Session 4D: SCA2012 - Social Network Analysis and Mining

Chair:

- **Forum Data Extraction without Explicit Rules**
Jingwei Zhang, Cheqing Jin, Yuming Lin, Xueqing Gong
- **AUTrust: A Practical Trust Measurement for Adjacent Users in Social Networks**
Guangyu Yin, Fan Jiang, Shaoyin Cheng, Xiang Li and Xing He
- **Local Community Detection Using Seeds Expansion**
Bingying Xu, Zheng Liang, Yan Jia, Bin Zhou, Yi Han
- **Negative Effects of Incentivised Viral Campaigns for Activity in Social Networks**

Radoslaw Michalski, Jaroslaw Jankowski, Przemyslaw Kazienko

- **COG Network Model for Military Planning Based on Improved Analysis Network Process**

Jiang Wang, Xiu-qun Feng, Meng Qian, Cheng Zhu

- **PSO-TPS: An Optimal Trust Path Selection Algorithm Based on Particle Swarm Optimization in Small World Network**

Guangquan Xu, Chao Xu, Xiuming Tian, Luxia Zhang, Xiaohong Li and Weisheng Li

Session 5C: SCA 2012 - Social Computing Applications

Chair:

- **A Visual Exploratory Search Engine Solution Based on Cloud Computing**

Jiyu Tang, Xinhuai Tang and Delai Chen

- **Efficient Structural Query Evaluation over Social Data**

Chaoyong Wang, Xueqing Gong, Xiaoling Wang

- **Applying Centrality Measures to the Behavior Analysis of Developers in Open Source Software Community**

Peng He, Bing Li and Yuan Huang

- **Investigating City Characteristics based on Community Profiling in LBSNs**

Zhu Wang, Daqing Zhang, Dingqi Yang, Zhiyong Yu, Xingshe Zhou, Zhiwen Yu

- **An Automated Web Services Composition System Based on Service Classification and AI Planning**

Shanfeng Qi, Xinhuai Tang and Delai Chen

- **Establishing Service Level Agreement Requirement Based on Monitoring**

Zhang Haiteng, Shao Zhiqing, Zheng Hong and Zhai Jie

- **Analysis of the Digital Home Wireless Meter Reading Interface Execution Process**

Hong Zheng, Yihong Wang, WeiminZhong

Workshops and Symposiums

Session 1C: BigDataMR2012

Chair:

- **The Impact of Capacity Scheduler Configuration Settings on MapReduce Jobs**
Jagmohan Chauhan, Dwight Makaroff, Winfried Grassmann
- **Performance Model for Parallel Matrix Multiplication with Dryad: Dataflow Graph**
Hui Li, Geoffrey Fox, Judy Qiu
- **A Content-based Image Retrieval System Based on Hadoop and Lucene**
Chunhao Gu, Yang Gao
- **Performance Optimization for Short MapReduce Job Execution in Hadoop**
Jinshuang Yan, Xiaoliang Yang, Rong Gu, Chunfeng Yuan, Yihua Huang
- **Hadoop-based Genome Comparisons**
Paul Heinzlreiter, Michael T. Krieger, Iris Leitner
- **Big Data Challenges: A Program Optimization Perspective**
Arun Kejariwal

Session 1D: SNSDB2012

Chair: Jonghwa Na, Chungbuk National University, South Korea

- **Finding Core Topics: Topic Extraction with Clustering on Tweet**
Sungchul Kim, Sungho Jeon, Jinha Kim, Young-Ho Park, Hwanjo Yu
- **Time-dependent User Profiling for TV Recommendation**
Jinoh Oh, Youngchul Sung, Jinha Kim, Muhammad Humayoun, Young-Ho Park, Hwanjo Yu
- **A Partitioned-based Method of Convex Skyline for Efficient Processing Top-k Queries**
Ki-Eun Lee, Sun-Young Ihm, Jun-Seok Heo, Jeong-Joon Lee and Young-Ho Park
- **UNWRAP: An Approach on Wrapping-Attack Tolerant SOAP Messages**
Aziz Nasridinov, Jeong-Yong Byun and Young-Ho Park
- **A QoS-Aware Performance Prediction for Self-Healing Webservice Composition**
Aziz Nasridinov, Jeong-Yong Byun and Young-Ho Park

- **Movie Recommendation System Based on Movie Swarm**

Sajal Halder, A. M. Jehad Sarkar and Young-Koo Lee

Session 2D: BigDataMR2012 / SNSDB2012

Session 2D-a: BigDataMR2012 (16:20 – 17:20)

Chair:

- **Ontology-based Temporal Relation Modeling with Map-Reduce Latent Dirichlet Allocations for Big EHR data**
Dingcheng Li, Cui Tao, Hongfang Liu, Christopher Chute
- **Beyond Simple Integration of RDBMS and MapReduce-Paving the Way toward a Unified System for Big Data Analytics: Vision and Progress**
Xiongpai QIN, Huiju WANG, Furong LI, Baoyao ZHOU, Yu CAO, Cuiping LI, Hong CHEN, Xuan ZHOU, Xiaoyong DU, Shan WANG
- **A Selection Strategy Supporting Service Outsourcing in Cloud Platform**
Jiancheng Ni, Lianyong Qi, Chao Yan

Session 2D-b: SNSDB2012 (17:20 – 18:00)

Chair: Woo-Key Lee, Inha University, South Korea

- **A Big Data Model supporting Information Recommendation in Social Networks**
Xiaoyue Han, Lianhua Tian, Minjoo Yoon, Minsoo Lee
- **Sequence Data Indexing Method based on Minimum DTW Distance**
Kijeong Khil and Seokil Song

Session 5B: SNAIDM2012

Chair:

- **Rich-club Connectivity in Large-scale Complex Networks**
Rongtian He, Jichang Zhao and Ke Xu
- **Pairwise Interaction Pattern in The Weighted Communication Network**
Xiao-Ke Xu, Jian-Bo Wang, Ye Wu and Michael Small
- **Modeling of posting behavior in mobile internet based on human dynamics**
Qiang Yan, Lianren Wu and Lanli Yi
- **Analysis of competitive information dissemination in social network based on evolutionary game model**
Jianye Yu, Yuanzhuo Wang, Jingyuan Li, Huawei Shen and Xueqi Cheng
- **Training Opinion Leaders in Microblog: a Game Theory Approach**

Jingyuan Li, Guoliang Xing, Yuanzhuo Wang, Yan Ren

- **The untold story behind the recommendation in micro-blogging network**

Tong Man, Hua-Wei Shen, Xue-Qi Cheng

Session 5D: WMSC2012/ WW2012/PriSecCSN2012

Session 5D-a: WMSC2012 (13:30-14:30)

Chair: Dr. Mingzhong Wang, Beijing Institute of Technology, China

- **Workflow Refactoring for Concurrent Task Execution**

Mingzhong Wang, Jinjun Chen and Liehuang Zhu

- **A Performance Analysis on Task Allocation using Social Context**

Jiaying Xu, Zhenguang Huang, Yang Yu and Maolin Pan

- **A particle swarm optimization algorithm for batch processing workflow scheduling**

Yiping Wen, Zhigang Chen, Tiemin Chen, Jianxun Liu and Guosheng Kang

Session 5D-b: WW2012 (14:30-15:10)

Chair: Dr. Xing Wu, Shanghai University, China

- **A Method of Extracting High Precision Point to Replace in-situ SST Data**

Hongmei Shi, Lingyu Xu, Cuicui Song, Xiangfeng Luo, Fei Zhong, Yang Liu

- **A Decentralized Approach for Implementing Identity Management in Cloud Computing**

Jun Chen, Xing Wu, Shilin Zhang, Wu Zhang, Yanping Niu

Session 5D-c: PriSecCSN2012 (15:10-16:10)

Chair:

- **A consent-patientship based privacy model for healthcare**

Teemupekka Virtanen

- **Open Social and XACML based Group Authorization Framework**

Hui Zhang, ZhenAn Li and Wenjun Wu

- **An Advanced Mutual-Authentication Algorithm Using 3DES for Smart Card Systems**

Hippolyte Djonon Tsague, Fulufhelo Nelwamondo and Ntsika Msimang

CGC2012 Organizing and Program Committees

Honorary Chairs

Ramamohanarao Kotagiri, The University of Melbourne, Australia
Jack Dongarra, University of Tennessee, USA
Deyi Li, Chinese Academy of Engineering, China

General Chairs

Ivan Stojmenovic, University of Ottawa, Canada
Albert Zomaya, The University of Sydney, Australia
Hai Jin, Huazhong University of Science and Technology, China

General Vice-Chairs

Geoffrey Fox, Indiana University, USA
Schahram Dustdar, Vienna University of Technology, Austria
Laurence Yang, St Francis Xavier University, Canada

Program Chairs

Jinjun Chen, University of Technology, Sydney, Australia
Peter Brezany, University of Vienna, Austria
Jianxun Liu, Hunan University of Science and Technology, China

Program Vice-Chairs

Yang Yu, Sun Yat-Sen University, China
Ivona Brandic, Vienna University of Technology, Austria,
Ching-Hsien (Robert) Hsu, Chung Hua University, Taiwan
Jemal Abawajy, Deakin University, Australia

Workshop Chairs

Zizhong (Jeffrey) Chen, Colorado School of Mines, USA
Rajiv Ranjan, The University of New South Wales, Australia
Wanchun Dou, Nanjing University, China

Steering Committee

Mohammed Atiquzzaman, University of Oklahoma, USA
Rajkumar Buyya, The University of Melbourne, Australia
Jack Dongarra, University of Tennessee, USA
Schahram Dustdar, Vienna University of Technology, Austria

Geoffrey Fox, Indiana University, USA
Hai Jin, Huazhong University of Science and Technology, China
Jinjun Chen, University of Technology, Sydney, Australia (Chair)
Andrzej Goscinski, Deakin University, Australia
Anthony D. Joseph, UC Berkeley, USA
Jordi Torres, Technical University of Catalonia, Spain
Manish Parashar, Rutgers University, USA
Laurent Lefevre, INRIA, France
Ivan Stojmenovic, University of Ottawa, Canada
Laurence T. Yang, St Francis Xavier University, Canada (Chair)
Jianxun Liu, Hunan University of Science and Technology, China

Award Chairs

Guojun Wang, Central South University, China

Panel Chairs

Jinjun Chen, University of Technology, Sydney, Australia (Chair)
Jian Cao, Shanghai Jiao Tong University, China

Publication Chairs

Wei Tan, IBM Waston Research Center, USA
Kaijun Ren, National University of Defense Technology, China

Local Organizing Committee

Jianxun Liu, Hunan University of Science and Technology, China (Chair)
Jian Cao, Shanghai Jiao Tong University, China
Wanchun Dou, Nanjing University, China
Yang Yu, Sun Yat-Sen University, China
Xinjun Mao, National University of Defense Technology, China
Guojun Wang, Central South University, China
Kenli Li, Hunan University, China

Finance Chairs

Buqing Cao, Hunan University of Science and Technology, China
Puyang Yu, Hunan University of Science and Technology, China

Conference Secretary and Web Chairs

Zhuhua Liao, Hunan University of Science and Technology, China
Guosheng Kang, Hunan University of Science and Technology, China

Program Committees

Adrien Lèbre, Chargé de recherche EMN-EPA, France
Ahmed Amer, Santa Clara University, USA
Albert Cheng, University of Houston, USA
Alexander Papaspyrou, Dortmund University, Germany
Alfonso Niño Ramos, Universidad de Castilla-La Mancha, Spain
Andreas Menychtas, National Technical University of Athens, Greece
Antonin Chazalet, France Télécom, France
Armin Haller, CSIRO ICT Centre, Australia
Asif Qumer, ANZ, Australia
Baoliu Ye, Nanjing University, China
Boualem Benatallah, University of New South Wales, Australia
Bo LIU, University of Chicago, Argonne National Laboratory, USA
Brahmananda Sapkota, University of Twente, Netherlands
Bruno Ciciani, University "La Sapienza" Roma, Italy
C. Mani Krishna, University of Massachusetts, USA
Camelia Muñoz-Caro, Universidad de Castilla-La Mancha, Spain
Carson Kai-sang Leung, University Of Manitoba, Canada
Chadi Aoun, University of Technology, Sydney, Australia
Chao-Tung Yang, Tunghai University, Taiwan
Chen Wang, CSIRO, Australia
Chang Liu, University of Technology Sydney, Australia
Ching-Hsien Hsu (Robert), Hsu Chung Hua University, Taiwan
Cho-Li Wang, University of Hong Kong, Hong Kong
Danilo Ardagna, Politecnico di Milano, Italy
Dariusz Król, Wrocław University of Technology, Poland
Dharmender Singh Kushwaha, Motilal Nehru National Institute of Technology - Allahabad, India
Dian W Tjondronegoro, Queensland University Of Technology, Australia
Dickson K.W. Chiu, Dickson Computer Systems, H.K, China
Dimitrios Georgakopoulos, CSIRO ICT Center, Canberra, ACT, Australia
Dimosthenis Kyriazis, National Technical University of Athens, Greece
Domenico Talia, Università della Calabria, Italy
Donglin Xia, Bing Search, Microsoft, USA
Dongwan Shin, New Mexico Tech, USA
Erik Elmroth, Umeå University, Sweden
Eugen Volk, University of Stuttgart, Germany
George Kousiouris, National Technical University of Athens, Greece
Goran Martinovic, J.J. Strossmayer University of Osijek, Croatia
Gregor Schiele, Universitaet Mannheim, Germany
Guangdeng Liao, University of California, Riverside, USA
Guojun Wang, Central South University, China
Hai Jiang, Arkansas State University, USA
Hai Jin, Huazhong University of Science and Technology, China

Haifeng Chen, Pusan National University, Republic of Korea
Hangwei Qian, Case Western Reserve University, USA
Heyuan Huang, IBM Research - China, China
Hong Shen, The University of Adelaide, Australia
Hong Zhu, Oxford Brookes University, UK
Hongji Yang, De Montfort University - Leicester, England
Hongyu Zhang, Tsinghua University, China
Ilkay Altintas, University of California, San Diego, USA
Ivan Rodero, Rutgers the State University of New Jersey/NSF Center for Autonomic Computing, USA
Jaosn Xue, City University of Hong Kong, Hong Kong, China
Javier Diaz, Indiana University, USA
Jemal Abawajy, Deakin University, Australia
Ji Zhang, University of Southern Queensland, Australia
Jian Cao, Shanghai Jiaotong University, China
Jian Wu, Zhejiang University, China
Jian Yang, Macquaire University, Australia
Jianxin Li, Beihang University, China
Jianxun Liu, Hunan University of Science and Technology, China
Jichuan Chang, HP Labs, USA
Joerg Haehner, University of Hannover, Germany
Jogesh K. Muppala, Hong Kong University of Science and Technology, Hongkong, China
Jorge Ejarque, Barcelona Supercomputing Center
Jose Merseguer, Universidad de Zaragoza, Spain
Juan-Vicente Capella-Hernández, Universidad Politécnica de Valencia, Spain
Judy Qiu, Indiana University, USA
Julius Leite, Universidade Federal Fluminense, Brazil
Jun Shen, University of Wollongong, Australia
Jun Yan, University of Wollongong, Australia
Junwei Cao, Tsinghua University, China
Justin Rough, Deakin University, Australia
Kaijun Ren, National University of Defense Technology, China
Kenneth Hawick, Massey University, New Zealand
Keqiu Li, Dalian University of Technology, China
Kenli Li, Hunan University, China
Kerry Taylor, CSIRO ICT Centre, Australia
Kevin Lee, Murdoch University, Australia
Konstantin Läufer, Loyola University Chicago, USA
Kris Bubendorfer, Victoria University of Wellington, New Zealand
Kuan-Ching Li, Providence University, Taiwan
Kyong Hoon Kim, Gyeongsang National University, Korea
Ligang He, University of Warwick, UK
Lizhe Wang, Indiana University, USA
Luca Benini, University of Bologna, Italy

Markus Aleksy, ABB Corporate Research, Germany
Martijn Warnier, Delft University of Technology, Netherlands
Martin Schulz, Lawrence Livermore National Laboratory
Massimo Cafaro, University of Lecce, Italy
Massimo Villari, University of Messina, Italy
Michael Hobbs, Deakin University, Australia
Michael Sheng, The University of Adelaide, Australia
Morris Riedel, Forschungszentrum Jülich GmbH (Jülich Research Centre), Germany
Naijie Gu, University of Science and Technology of China, China
Nikzad Babaii Rizvandi, National ICT Australia
Paolo Missier, Newcastle University, UK
Peter Strazdins, The Australian National University, Australia
Qi Yu, Rochester Institute of Technology, USA
Qinbao Song, Xi'an Jiao Tong University, China
Qing Zhang, E-health research centre, Australia
Radu Prodan, University of Innsbruck, Austria
Rami G Melhem, University of Pittsburgh,, USA
Ramin Yahyapour, Gesellschaft fuer wissenschaftliche Datenverarbeitung, Gemany
Richard Lin, National Sun Yat-sen University, Kaohsiung, Taiwan
Rob Gillen, Oak Ridge National Lab, USA
Rodrigo Calheiros, University of Melbourne, Australia
Ruay-Shiung Chang, National Dong Hwa University, Taiwan
Sabri Pllana, University of Vienna, Austria
Saurabh Garg, University of Melbourne, Australia
Seng Wai Loke, La Trobe University, Australia
Shah Asaduzzaman, Carleton University, Canada
Shao Xu, Institute for Infocomm Research, Singapore
Sheng-De Wang, National Taiwan University, Taiwan
Shrideep Pallickara, Colorado State University, USA
Siegfried Benkner, Vienna University, Austria
Simon Caton, Karlsruhe Institute of Technology, Germany
Simona Bernardi, Centro Universitario de la Defensa/Academia General Militar - Zaragoza, Spain
Sören Frey, University of Kiel, Germany
Surya Nepal, CSIRO ICT Centre, Australia
Tao Hu, Hainan University, China
Tarek Abdelzاهر, University of Illinois at Urbana–Champaign, USA
Tharam Dillon, Curtin University, Australia
Thomas Hacker, Purdue University, USA
Timothy Wood, George Washington University, USA
Toan Nguyen, INRIA, France
TS Mohan, Infosys Technologies, India
Umar Farooq, SMART Technologies, Canada
Varia, Jinesh, Amazon, USA

Waheed Iqbal, AIT, Thailand
Wanchun Dou, Nanjing University, China
Wei Tan, IBM T. J. Watson Research Center, USA
Weifa Liang, Australian National University, Australia
Weiping Li, Peking University, China
Wei Wei, Xi'an Jiaotong University, China
William C. Chu, Tunghai University Taichung
William Knottenbelt, Imperial College, UK
Willy Susilo, University of Wollongong, Australia
Wolf Zimmermann, Martin-Luther University Halle-Wittenberg, Germany
Wolfgang Gentzsch, DEISA (Europe) and Open Grid Forum (USA)
Xiaoqing (Frank) Liu, Missouri University of Science and Technology - Rolla, USA
Xiaorong Li, Institute of High Performance Computing, Singapore
Xingang Liu, University of Electronic Science and Technology of China, China
Xinjun Mao, National University of Defense Technology, China
Xumin Liu, Rochester Institute of Technology, USA
Xuyun Zhang, University of Technology Sydney, Australia
Yanbo Han, Institute of Computing Technology, Chinese Academy of Sciences, China
Yang Xiang, Deakin University, Australia
Yang Yu, Sun Yat-Sen University, China
Yong Woo Lee, The University of Seoul, Korea
Yu Chen, State University of New York-Binghamton, USA
Yufeng Wang, Nanjing University of Posts and Telecommunications, China
Yun Yang, Swinburne University of Technology, Australia
Yunquan Zhang, Institute of Software, CAS, China
Zhaobin Liu, Dalian Maritime University, China
Zhiwen Yu, Northwestern Polytechnic University, China
Zhiyi Huang, Otago University, NZ
Zhoujun Li, Beihang University, China
Zibin Zheng (Ben), The Chinese University of Hong Kong, Hong Kong, China

SCA2012 Organizing and Program Committees

Honorary General Chairs

Jiawei Han, University of Illinois at Urbana-Champaign, USA

Kyu-Young Whang, Korea Advanced Institute of Science and Technology, Korea

General Chairs

Irwin King, the Chinese University of HongKong, Hong Kong

Wolfgang Nejdl, L3S, Germany

Feiyue Wang, Chinese Academy of Sciences, China

General Vice Chairs

V.S. Subrahmanian, University of Maryland, USA

Jiming Liu, Hong Kong Baptist University, China

Jinho Kim, Kangwon National University, Korea

Program Chairs

Aoying Zhou, East China Normal University, China

Guandong Xu, Victoria University, Australia

Nitin Agarwal, University of Arkansas at Little Rock, USA

Program vice-Chairs

Tim Butcher, Royal Melbourne Institute of Technology, Australia

Akiyo Nadamoto, Konan University, Japan

Xiaoqing (Frank) Liu, Missouri University of Science and Technology, USA

Tiejian Luo, Graduate University of the Chinese Academy of Sciences, China

Workshop Chairs

Wookey Lee, Inha University, Korea

Xiangfeng Luo, Shanghai University, China

Steering Committee

V.S. Subrahmanian, University of Maryland, USA

Irwin King, The Chinese University of Hongkong, China

Igor Hawryszkiewicz, University of Technology, Sydney, Australia

Jinjun Chen, University of Technology, Sydney, Australia (Chair)

Feiyue Wang, Chinese Academia of Science, China

Wesley Chu, University of California, USA

Shaun Lawson, University of Lincoln, UK
Jianhua Ma, Hosei University, Japan
John Yen, Pennsylvania State University, USA
Jiming Liu, Hong Kong Baptist University, China
Adrian David Cheok, National University of Singapore, Singapore
Craig Standing, Edith Cowan University, Australia
Laurence T. Yang, St Francis Xavier University, Canada (Chair)

Publicity Chairs

Ting Liu, Harbin Institute of Technology, China
Zongda Wu, University of Science & Technology of China, China

Publication Chairs

Jinjun Chen, University of Technology, Sydney, Australia
Jianxun Liu, Hunan University of Science and Technology, China

Local Organizing Committee

Jianxun Liu, Hunan University of Science and Technology, China (Chair)
Jian Cao, Shanghai Jiao Tong University, China
Wanchun Dou, Nanjing University, China
Yang Yu, Sun Yat-Sen University, China
Xinjun Mao, National University of Defense Technology, China
Guojun Wang, Central South University, China
Kenli Li, Hunan University, China
Zhoujun Li, Beihang University, China

Finance Chairs

Buqing Cao, Hunan University of Science and Technology, China
Puyang Yu, Hunan University of Science and Technology, China

Conference Secretary and Web Chairs

Zhuhua Liao, Hunan University of Science and Technology, China
Guosheng Kang, Hunan University of Science and Technology, China

Program Committees

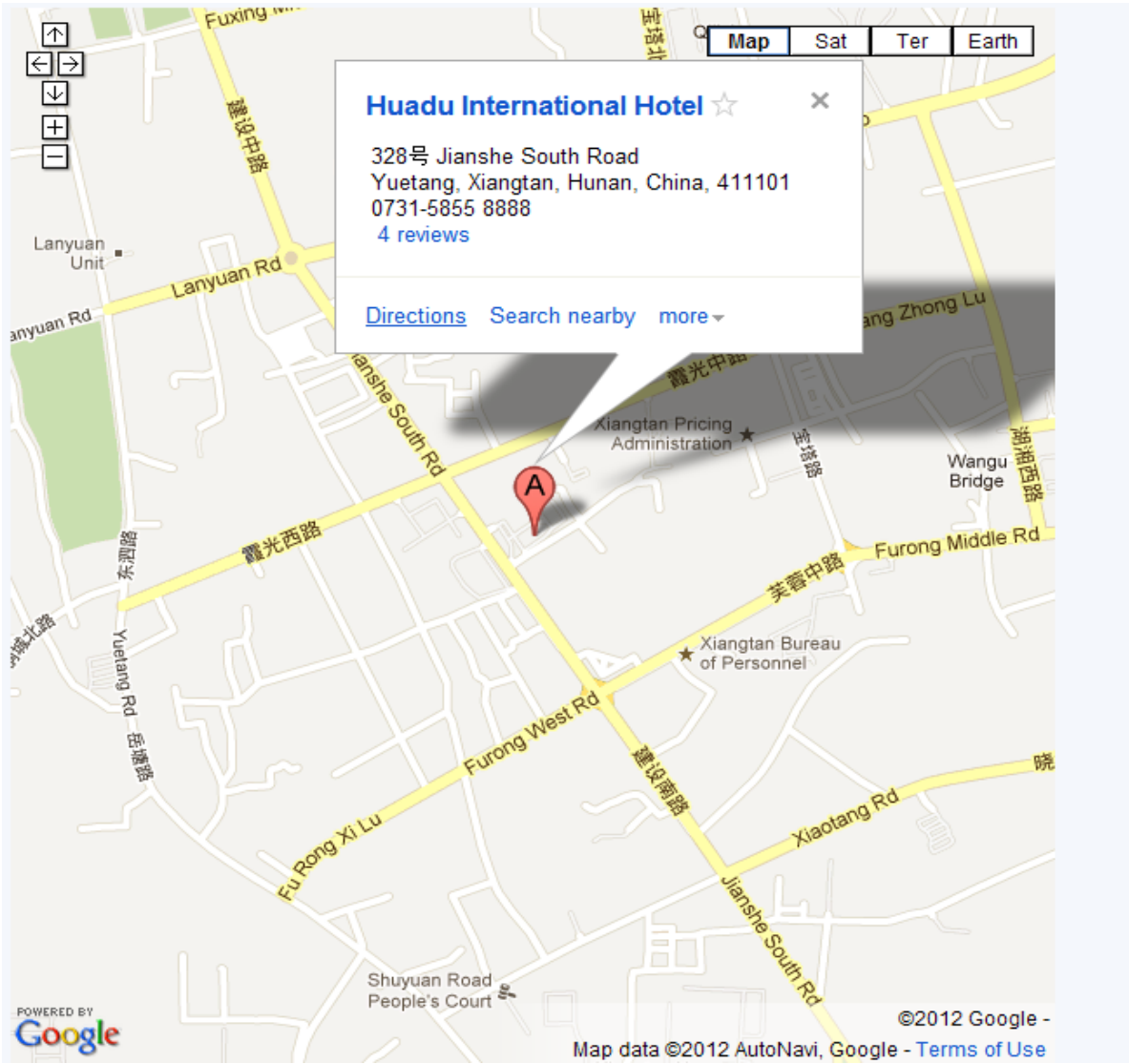
Abdullah Uz Tansel, Baruch College, USA
Adam Krzyzak, Concordia University, Canada
Ali Shahrabi, Glasgow Caledonian University, UK
Axel Ngonga, Universitat Leipzig, Germany
Ben He GUCAS, China

Bulent Tavli, TOBB ETU, Turkey
Carsonkai-Sang Leung University of Manitoba, Canada
Chaokun Wang, Tsinghua University, China
Chunjie Zhou, Ludong University, China
Christos Grecos, University of West of Scotland, UK
Dou Shen, Microsoft - Redmond, USA
Dunlu Peng Shanghai University of Science & Technology
Edo Airoidi, Harvard University, USA
Eiko Yoneki, University of Cambridge, UK
Federico Neri, SyNTHEMA Language Intelligence, Italy
Flavius Frasinca, Erasmus University Rotterdam, Netherlands
Florian Daniel, University of Trento
Frederic Amblard, CNRS-IRIT, France
Gaël Harry Dias, University of Caen Basse-Normandie, France
Gang Li, Deakin University - Melbourne Campus, Australia
Guoqiang Zhang, Nanjing Normal University, China
Guandong Xu, Victoria University, Australia
Haifeng Shen, Flinders University, Australia
Hiroyuki Kitagawa, Tsukuba University, Japan
Huan Liu, Arizona State University, USA
Iraklis Varlamis, Harokopio University of Athens, Greece
James Bailey, University of Melbourne, Australia
James Geller, New Jersey Institute of Technology, USA
Jerzy Surma, Warsaw School of Economics, Poland
Jianmin Wang, Tsinghua University, China
Jianke Zhu Zhejiang University, China
Jianwei Zhang, Kyoto Sangyo University, Japan
Jose Zubcoff, University of Alicante, Spain
Jon Dron, Athabasca University, Canada
Joonsoo Bae, Chonbuk National University, Korea
Juan Manuel Serrano Hidalgo, Universidad Rey Juan Carlos
Jun Han, Swinburne University of Technology, Australia
Juwel Rana, Luleå University of Technology, Sweden
Kazutoshi Sumiya, University of Hyogo, Japan
Kåre Synnes, Luleå University of Technology, Sweden
Keisuke Nakao, University of Hawaii at Hilo, USA
Kun Yue, Yunnan University
Lashon Booker, The MITRE Corporation
Lei Tang, Arizona State University, USA
Levent Yilmaz, Auburn University, USA
Lilia Georgieva, Heriot-Watt University, UK
Lin Li Wuhan University of Technology, China
Ling-Jyh Chen, Academia Sinica, Taiwan
Lubna Alam, University of Canberra, Australia

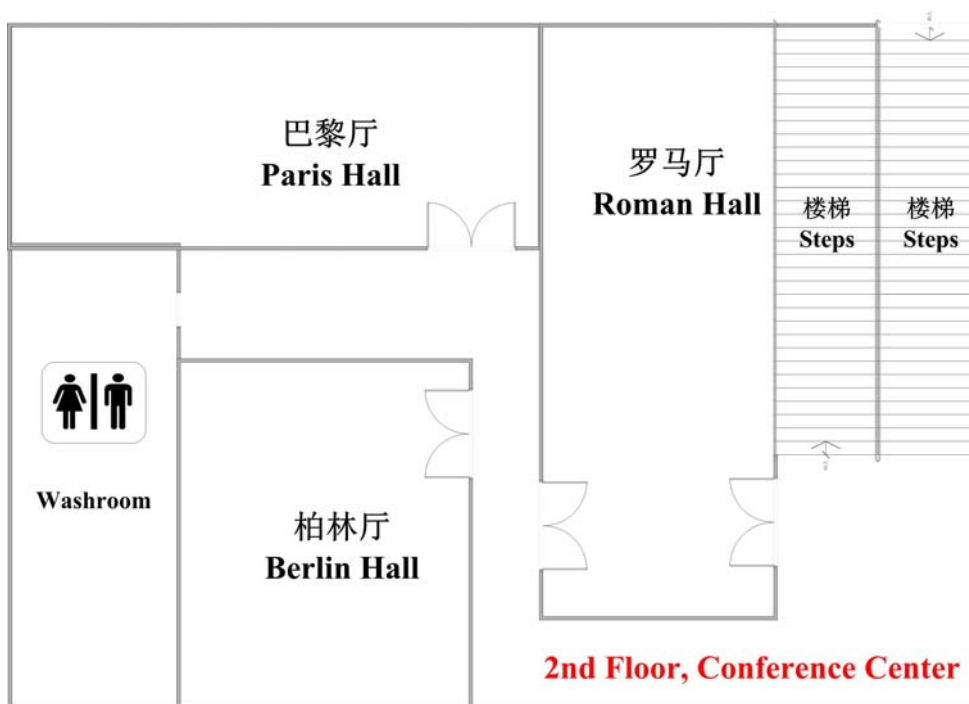
Lynda Tamine-Lechani, Université Paul Sabatier / IRIT - Toulouse, France
Lynne Hall, University of Sunderland, UK
Man-Kwan Shan, National Chengchi University, Taiwan
Marenglen Biba, University of New York Tirana, Albania
Matthew Rowe, Open University, UK
Mauro Conti, University of Padua, Italy
Mehmet Kaya, Firat University, Turkey
Mehmet Tan, TOBB ETU, Turkey
Mikolaj Morzy, Poznan University of Technology, Poland
Mi-Yen Yeh, Academia Sinica, Taiwan
Mingdong Tang, Hunan University of Science and Technology, China
Minqi Zhou, East China Normal University
Mohammad Siddique, Fayetteville State University, USA
Mukesh Mohania, IBM India Research Laboratory, India
Myongkeun Shin, SK C&C, Korea
Nathalie Colineau, CSIRO-ICT Centre, Australia
Nick Letch, University of Western Australia
Nima Dokoochaki, Royal Institute of Technology (KTH) - Stockholm, Sweden
Palakorn Achananuparp (Aek), Singapore Management University, Singapore
Panagiotis Karampelas, Hellenic American University, USA
Paolo Garza, Dipartimento di Elettronica e Informazione, Politecnico di Milano, Italy
Paul Johannesson, Stockholm University
Peter Dolog, Aalborg University, Denmark
Peter Mutschke, GESIS - Leibniz Institute for the Social Sciences - Bonn, Germany
Przemyslaw Kazienko, Wroclaw University of Technology, Poland
Raian Ali, Bournemouth University, UK
Ralf Klamma, RWTH Aachen University, Germany
Richard Gunstone, Bournemouth University, UK
Richard Sia, Microsoft, USA
Rolf Wigand, University of Arkansas Little Rock
Ron Sun, Rensselaer Polytechnic Institute, USA
Rong Zhang, East China Normal University
Sangwook Kim, Hanyang University, Korea
Shou-de Lin National Taiwan University, Taiwan
Sherif Sakr, NICTA, Australia
Simon Caton, Karlsruhe Institute of Technology
Sotiris Ioannidis, FORTH, Greece
Soonae Chun, City University of New York, USA
Tansel Ozyer, TOBB Economics and Technology University
Thanos Vasilakos, National Technical University of Athens, Greece
Tieyun Qian, Wuhan University, China
Ting Liu, Harbin Institute of Technology, China
Ting Wang, National University of Defense Technology, China
Tingshao Zhu, GUCAS, China

Toshiyuki Amagasa, Tsukuba University, Japan
Tyrone W. Grandison, IBM Almaden Research Center, USA
Ulrike Lucke, University of Potsdam, Germany
Uwe Glaesser, Simon Fraser University, Canada
Vassilis Kostakos, University of Maderia, Portugal
Wai-Tat Fu, University of Illinois at Urbana-Champaign, USA
Walid Maalej, Technische Universität München, Germany
Wansup Cho, Chungbuk National University, Korea
Wenjun Zhou, Rutgers Business School, USA
Weining Qian, East China Normal University
Wenxin Liang, Dalian University of Technology, China
Wookey Lee, Inha University, Korea
Witold Pedrycz, University of Alberta, Canada
Xingquan Zhu, Florida Atlantic University - Boca Raton, USA
Xiaohui Tao, University of Suothen Queensland, Australia
Xiaolin Shi, Microsoft, USA
Xiuzhen Zhang, RMIT, Australia
Xueqi Cheng, Institute of Computing Technology, Chinese Academy of Science, China
Xumin Liu, Rochester Institute of Technology, USA
Xuyun Zhang, University of Technology Sydney, Australia
Yimin Wen, Guilin University of Electronic Technology
Yi Cai, South China University of Technology
Yonglin Ren, University of Ottawa, Canada
Yu Zhang, Trinity University, USA
Yu Zong, West Anhui University, China
Zhenglu Yang, University of Tokyo, Japan
Zhiyong Peng, Wuhan University, China
Zhoujun Li, Beihang University, China
Zongda Wu, Wenzhou University, China

Location of Conference Venue, Huadu International Hotel



Layout of the 2nd Floor, Conference Center



Layout of the 3rd Floor, Conference Center

