

4th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2011)

Overall Program - Draft

Day 1: December 5, 2011			
ROOM	Ballroom A	Ballroom B	Ballroom C
8:00 AM – 9:00 AM	Registration		
9:00 AM – 10:30 AM	Opening & Keynote 1		
10:30 AM – 11:00 AM	Morning Tea		
11:00 AM – 1:00 PM	Regular Papers 1	Tutorial 1	CCSA
1:00 PM – 2:00 PM	LUNCH		
2:00 PM – 4:00 PM	Regular Papers 2	Tutorial 2	CCSA
4:00 PM – 4:30 PM	Afternoon Tea		
4:30 PM – 6:00 PM	Short Papers 1	Short Papers 2	CCSA
Day 2: December 6, 2011			
ROOM	Ballroom A	Ballroom B	Ballroom C
9:00 AM – 10:00 AM	Keynote 2		
10:00 AM – 10:30 AM	Morning Tea		
10:30 AM – 12:30 PM	Regular Papers 3	Regular Papers 4	ITACC
12:30 PM – 1:30 PM	LUNCH		
1:30 PM – 3:30 PM	Industry Track		
3:30 PM – 4:30 PM	Poster & Demos with Afternoon Tea		
4:30 PM – 6:00 PM	Regular Papers 5	Regular Papers 6	ITACC
Day 3: December 7, 2011			
ROOM	Ballroom A	Ballroom B	Ballroom C
9:00 AM – 10:00 AM	Keynote 3		
10:00 AM – 10:30 AM	Morning Tea		
10:30 AM – 12:30 PM	Regular Papers 7	CSSQM	CC & Future of Work
12:30 PM – 1:30 PM	LUNCH		
1:30 PM – 3:30 PM	Regular Papers 8	Regular Papers 9	CC & Future of Work
3:30 PM – 4:00 PM	Afternoon Tea		
4:00 PM – 5:30 PM	Panel		
5:30 PM – 6:00 PM	Closing Session		
7:00 PM – 10:00 PM	Social Program/Conference Dinner		

Day 1: December 5, 2011

8:00 AM – 9:00 AM	Registration		
9:00 AM – 10:30 AM	Conference Opening Keynote 1 – Energy-Efficient Cloud Computing Professor Professor Albert Zomaya, The University of Sydney, Australia		
10:30 AM – 11:00 AM	Morning Tea		
11:00 AM – 1:00 PM	Regular Papers 1	Tutorial 1	CCSA
Venue: Ballroom A	Regular Papers Session 1: Storage		
<ul style="list-style-type: none"> • Information Dispersion over Redundant Arrays of Optimal Cloud Storage for Desktop Users <i>Josef Spillner, Alexander Schill, Gerd Bombach, Steffen Matthischke, Johannes Müller and Rico Tzschichholz</i> • Placement Matters: Replica Placement in Peer-Assisted Storage Clouds <i>Ahmed Ali-Eldin and Sameh El-Ansary</i> • Galileo: A Framework for Distributed Storage of High-Throughput Data Streams <i>Matthew Malensek, Sangmi Lee Pallickara and Shrideep Pallickara</i> • High-speed storage nodes for the cloud <i>Nigel Edwards, Mark Watkins, Matt Gates, Alistair Coles, Eric Deliot, Aled Edwards, Anna Fischer, Patrick Goldsack, Tom Hancock, Donagh McCabe, Tim Reddin, JP Sullivan, Peter Toft, and Lawrence Wilcock</i> 			
Venue: Ballroom B	Tutorial 1: Turning Ideas Into Results: Practical Use Of AWS – Amazon Web Services Simon Elisha, Principal Solution Architect, Amazon Web Services		
Venue: Ballroom C	Cloud Computing and Scientific Applications Workshop (Session 1)		
<ul style="list-style-type: none"> • Resiliency Principles for Emergency Management Systems (Keynote talk) <i>Dr. Jürg von Känel (Senior Research Manager, IBM Research & Development Australia)</i> • Implementation and Usability Evaluation of a Cloud Platform for Scientific Computing as a Service (SCaaS) <i>Prasad Saripalli, Curt Oldenburg, Ben Walters and N. Radheshyam</i> • Data Transfer Performance of Web Service Workflows in the Cloud Environment <i>Donglai Zhang, Paul Coddington and Andrew Wendelborn</i> • Light-weight Cloud Job Management System for Data Intensive Science <i>Haehyun Kim and Jaegyoon Hahm</i> 			
1:00 PM – 2:00 PM	LUNCH		
2:00 PM – 4:00 PM	Regular Papers 2	Tutorial 2	CCSA
Venue: Ballroom A	Regular Papers Session 2: Data Processing Systems and Security in the Cloud		
<ul style="list-style-type: none"> • On the Performance of Distributed Clustering Algorithms in File and Streaming Processing Systems <i>Kathleen Ericson and Shrideep Pallickara</i> • An Efficient Cross-Match Implementation based on Directed Join Algorithm in MapReduce <i>Mi Cuncang, Chen Qian and Liu Taoying</i> • EDoS-Shield - A Two-Steps Mitigation Technique against EDoS Attacks in Cloud Computing <i>Mohammed H. Sqalli, Fahd Al-Haidari and Khaled Salah</i> • TVDSEC: Trusted Virtual Domains Security 			

<i>Udaya Tupakula and Vijay Varadharajan</i>			
Venue: Ballroom B	Tutorial 2: Scaling Web Applications using Google App Engine Brian Quinlan, Software Engineer, Google		
Venue: Ballroom C	Cloud Computing and Scientific Applications Workshop (Session 2)		
<ul style="list-style-type: none"> • Issues and Challenges in Cloud Storage Services (Keynote talk) <i>Dr. Surya Nepal (Principal Research Scientist, CSIRO ICT Centre, Australia)</i> • Participatory Cyber Physical System in Public Transport Application <i>John Kah Soon Lau, Chen-Khong Tham and Tie Luo</i> • Extending HTTP Models to Web 2.0 Applications: the case of Social Networks <i>Luca Caviglione</i> • Simplifying MapReduce Data Processing <i>Jin-Ming Shih, Chih-Shan Liao and Ruay-Shiung Chang</i> • Secure Desktop Cloud for Gravitational Wave Detection <i>Linqing Wen (Invited talk)</i> 			
4:00 PM – 4.30 PM	Afternoon Tea		
4:30 PM – 6:00 PM	Short Papers 1	Short Papers 2	CCSA
Venue: Ballroom A	Short Papers Session 1		
<ul style="list-style-type: none"> • Measurement for Improving the Design of Commodity Archival Storage Tiers <i>Dongjin Lee, Michael O'Sullivan and Cameron Walker</i> • Dynamic Mobile Cloud Computing: Ad Hoc and Opportunistic Job Sharing <i>Niroshinie Fernando, Seng Loke and Wenny Rahayu</i> • Practical Considerations in Cloud Utilization for the Science Gateway nanoHUB.org <i>Lynn Zentner, Steven Clark, Preston Smith, Swaroop Shivarajapura, Victoria Farnsworth, Krishna Madhavan and Gerhard Klimeck</i> • Monte Carlo linear system solver using MapReduce <i>Pelle Jakovits, Ilja Kromonov, and Satish Narayana Srirama</i> 			
Venue: Ballroom B	Short Papers Session 2		
<ul style="list-style-type: none"> • Test Reconfiguration for Service Oriented Applications <i>Mark B Cooray, James H Hamlyn-Haris and Robert G Merkel</i> • An Extensible Cloud Platform Inspired by Operating Systems <i>Akiyoshi Sugiki and Kazuhiko Kato</i> • Economic Perspectives of Cloud Computing <i>Zhongliu Xie</i> • Integrity Based Intrusion Detection System for Enterprise and Cloud Environments <i>Ferrol Aderholdt, Sheikh Ghafoor, Ambareen Siraj and Stephen Scott</i> 			
Venue: Ballroom C	Cloud Computing and Scientific Applications Workshop (Session 3)		
<ul style="list-style-type: none"> • FairCPU: Architecture for Allocation of Virtual Machines Using Processing Features <i>Emanuel Coutinho, Paulo Rego, Danielo Gomes and Jose De Souza</i> • Applications of Heterogeneous Computing in Computational and Simulation Science <i>Luke Domanski, Tomasz Bednarz, Tim Gureyev, Lawrance Murray, Emma Huang and John Taylor</i> • CLEVER: a Cloud Cross-Computing Platform leveraging GRID resources <i>Massimo Villari, Francesco Tusa, Antonio Puliafito and Maurizio Paone</i> • Listening for thunder beyond the clouds: using the grid to analyse gravitational wave data <i>Ra Inta(Invited talk)</i> 			

Day 2: December 6, 2011

9:00 AM – 10:00 AM	Keynote 2 – Can Clouds Transform Science? Exploring the Role of Clouds in Computational and Data-enabled Science and Engineering Professor Manish Parashar, Rutgers: The State University of New Jersey, USA		
10:00 AM – 10:30 AM	Morning Tea		
10:30 AM – 12:30 PM	Regular Papers 3	Regular Papers 4	ITACC
Venue: Ballroom A	Regular Papers Session 3: Virtual Machines I		
<ul style="list-style-type: none"> • Defeating Network Jitter for Virtual Machines <i>Luwei Cheng, Cho-Li Wang, and Sheng Di</i> • Utilizing Memory Content Similarity for Improving the Performance of Replicated Virtual Machines <i>Balazs Gerofi, Zoltan Vass and Yutaka Ishikawa</i> • Energy-efficient Virtual Machine Provision Algorithms for Cloud Systems <i>Ching-Chi Lin, Pangfeng Liu and Jan-Jan Wu</i> • Efficiency Assessment of Parallel Workloads on Virtualized Resources <i>Javier Delgado, Liana Fong, Yanbin Liu, Norman Bobroff, Seetharami Seelam and S. Masoud Sadjadi</i> 			
Venue: Ballroom B	Regular Papers Session 4: Clouds and Scientific applications		
<ul style="list-style-type: none"> • Portable Parallel Programming on Cloud and HPC: Scientific Applications of Twister4Azure <i>Thilina Gunarathne, Bingjing Zhang, Tak-Lon Wu, and Judy Qiu</i> • NetworkCloudSim: Modelling Parallel Applications in Cloud Simulations <i>Saurabh Kumar Garg and Rajkumar Buyya</i> • Coasters: uniform resource provisioning and access for scientific computing on clouds and grids <i>Mihael Hategan, Justin Wozniak and Ketan Maheshwari</i> • The Cloud@Home Resource Management System <i>Salvatore Distefano, Antonio Puliafito and Maria Fazio</i> 			
Venue: Ballroom C	Intelligent Techniques and Architectures for Autonomic Clouds Workshop (Session 1)		
<ul style="list-style-type: none"> • Load Prediction and Hot Spot Detection Models for Autonomic Cloud Computing <i>Prasad Saripalli, Gvr Kiran Kiran, Ravi Shankar, Harish Narware and Nitin Bindal</i> • Towards Context Caches in the Clouds <i>Saad Liaquat Kiani, Ashiq Anjum, Kamran Munir, Richard McClatchey, and Nick Antonopoulos</i> • A Dynamic VPN Architecture for Private Cloud Computing <i>Wen-Hwa Liao and Shuo-Chun Su</i> • An Architecture for Integrated Intelligence in Urban Management using Cloud Computing <i>Zaheer Khan, David Ludlow, Richard McClatchey, and Ashiq Anjum</i> 			
12:30 PM – 1:30 PM	LUNCH		
1:30 PM – 3:30 PM	Industry Track <ul style="list-style-type: none"> • Emerging Network Architectures for Cloud Computing <i>Geng Lin, Chief Technology Officer, Networking Business, Dell Inc.</i> • Open Internet of Things (OpenIoT) <i>Dr. Dimitrios Georgakopoulos, Director, Information Engineering Laboratory CSIRO ICT Centre, Australia</i> • Capabilities at Your Fingertips: An Overview of Innovation at AWS – 		

	<p>Amazon Web Services <i>Simon Elisha, Principal Solution Architect, Amazon Web Services</i></p> <ul style="list-style-type: none"> Fujitsu's Efforts in Cloud Computing <i>Bala Varadarajan, Managing Director, Fujitsu Australia Software Technology</i> 		
3:30 PM – 4:30 PM	Poster & Demos with Afternoon Tea		
<ul style="list-style-type: none"> Private Table Database Virtualization for DBaaS <i>Tim Kiefer and Wolfgang Lehner</i> Towards Open-Source Cloudware <i>Dana Petcu, Marc Frincu, Ciprian Dorin Crăciun, Silviu Panica, Marian Neagul and Georgiana Macariu</i> Ezilla Toolkit - One Click to Build Private Cloud Easily <i>Yi-Lun Pan, Chang-Hsing Wu, Hsi-En Yu, Hui-Shan Chen, and Weicheng Huang</i> A Secure Storage Service in the Hybrid Cloud <i>Surya Nepal, Carsten Friedrich, Leakha Henry and Shiping Chen</i> MeDiCi-Cloud: A Workflow Infrastructure for Large-scale Scientific Applications <i>Jian Yin, Guang Lin, Ian Gorton, and Binh Han</i> A Decision Framework for Discovery and Integration of Cloud Services (Web Poster) <i>Amirreza Tahamtan, Amin Anjomshoaa, S. Amir Beheshti, A Min Tjoa</i> DCC: Data Centric Compute Resource at the NCI-NF (Web Poster) <i>Jie Cai, Muhammad Atif, Michael Chapman, Joseph Antony, David Singleton, Ben Evans, and Peter Strazdins</i> 			
4:30 PM – 6:00 PM	Regular Papers 5	Regular Papers 6	ITACC
Venue: Ballroom A	Regular Papers Session 5: Virtual Machines II		
<ul style="list-style-type: none"> Impact of Cloud Computing Virtualization Strategies on Workloads' Performance <i>Qingling Wang and Carlos Varela</i> Towards Profitable Virtual Machine Placement in the Data Center <i>Weiming Shi and Bo Hong</i> Using Lightweight Virtual Machines to Run High Performance Computing Applications: The Case of the Weather Research and Forecasting Model <i>Hector Duran-Limon, Nikos Nikos Parlavantzas, Ming Zhao, Luis Silva-Bañuelos and Victor Tellez-Valdez</i> 			
Venue: Ballroom B	Regular Papers Session 6: Scheduling and load balancing I		
<ul style="list-style-type: none"> Server Consolidation Algorithms with Bounded Migration Cost and Performance Guarantees in Cloud Computing <i>Yufan Ho, Pangfeng Liu and Jan-Jan Wu</i> Characterizing e-science file access behavior via latent Dirichlet allocation <i>Yusik Kim and Cécile Germain-Renaud</i> Automated Configuration of Legacy Applications in the Cloud <i>Xavier Etchevers, Thierry Coupaye, Fabienne Boyer, Noël De Palma and Gwen Salaün</i> 			
Venue: Ballroom C	Intelligent Techniques and Architectures for Autonomic Clouds Workshop (Session 2)		
<ul style="list-style-type: none"> Distributed Green Compiler <i>Faiza Fakhar, Raihan Ur Rasool and Owais Malik</i> Dot-base62x: A Compact Textual Representation of IPv6 Address for Clouds 			

Zhenxing Liu, Lu Liu, James Hardy, Ashiq Anjum, Richard Hill, and Nick Antonopoulos

- Reliability Measurement of Web 2.0 based Cloud Applications

Zia Ul Qamar, Raihan Ur Rasool, Hammad Majeed, Imdad Ullah, Saeed Afzal, Bilal Ali, Hafiz Farooq Ahmad, and Sidrah Inayat

Day 3: December 7, 2011

9:00 AM – 10:00 AM	Keynote 3 – HPC in the Cloud: use cases from research and industry Dr. Wolfgang Gentzsch, DEISA (Distributed European Initiative for Supercomputing Applications), Germany		
10:00 AM – 10:30 AM	Morning Tea		
10:30 AM – 12:30 PM	Regular Papers 7	CSSQM	Cloud computing and future of work
Venue: Ballroom A	Regular Papers Session 7: Management of Cloud resources: Spot Instances, SLAs and Marketplaces I		
<ul style="list-style-type: none"> • Dynamic Resource Allocation for Spot Markets in Cloud Computing Environments <i>Qi Zhang, Quanyan Zhu and Raouf Boutaba</i> • An Autonomic Open Marketplace for Inter-Cloud Service Management <i>Haydn Mearns, John Leaney, Artem Parakhine, John Debenham and Dominique Verchere</i> • A Marketplace to Rule Them All - Combining WS-Agreement, Service Negotiation Protocols and Heterogeneous Services <i>Ralph Vigne, Juergen Mangler and Erich Schikuta</i> • Pricing Mechanisms for Cloud Services: Status Quo and Future Models <i>Florian Muhss, Robert Neumann and Andreas Schmietendorf</i> 			
Venue: Ballroom B	Cloud Service Security and Quality Management Workshop		
<ul style="list-style-type: none"> • Verification of Data Location in Cloud Networking <i>Thorsten Ries, Volker Fusenig, Christian Vilbois and Thomas Engel</i> • Verifying Digital Provenance in Web Services <i>Ben Palmer, Kris Bubendorfer and Ian Welch</i> • Performance Management for the Dynamic Storage Tiering by Virtual Volume Clustering <i>Hironori Emaru and Yoshiaki Takai</i> • SLA-based Content Delivery in multi-CDNs <i>Nadia Ranaldo and Eugenio Zimeo</i> 			
Venue: Ballroom C	Cloud Computing & Future of Work Workshop (Session 1)		
<ul style="list-style-type: none"> • Future of Pharmacy, Health & Wellness (Keynote Talk) <i>Manish Mathur (Senior Director of Architecture, Walgreens Pharmacy Health and Wellness)</i> • Effective Migration of Enterprise Applications in Multicore Cloud <i>Suresh Venugopal, Karthikeyan Ganesan and Sravan Desikan</i> 			
12:30 PM – 1:30 PM	LUNCH		
1:30 AM – 3:30 PM	Regular Papers 8	Regular Papers 9	Cloud computing and future of work
Venue: Ballroom A	Regular Papers Session 8: Management of Cloud resources: Spot Instances, SLAs and Marketplaces II		
<ul style="list-style-type: none"> • SMICloud: A Framework for Comparing and Ranking Cloud Services <i>Saurabh Kumar Garg, Steve Versteeg, and Rajkumar Buyya</i> • Statistical Modeling of Spot Instance Prices in Public Cloud Environments <i>Bahman Javadi, Ruppa Thulasiram and Rajkumar Buyya</i> • Cost-Efficient Utilization of Public SLA Templates in Autonomic Cloud Markets <i>Ivan Breskovic, Michael Maurer, Vincent Chimaobi Emeakaroha, Ivona Brandic and Schahram</i> 			

<i>Dustdar</i>	
<ul style="list-style-type: none"> Personalized Open API Recommendation in Clouds via Item-based Collaborative Filtering <i>Huifeng Sun, Zibin Zheng, Junliang Chen, Weimin Pan, Chuanchang Liu and Wenming Ma</i> 	
Venue: Ballroom B	Regular Papers Session 9: Scheduling and load balancing II
<ul style="list-style-type: none"> On Data Staging Strategies for Mobile Accesses to Cloud Services <i>Yang Wang, Bharadwaj Veeravalli and Chen-Khong Tham</i> Defragmentation of Resources in Virtual Desktop Clouds for Cost-Aware Utility-Optimal Allocation <i>Mukundan Sridharan, Prasad Calyam, Aishwarya Venkataraman and Alex Berryman</i> Intelligent Automated Diagnosis of Client Device Bottlenecks in Private Clouds <i>Chathuranga Widanapathirana, Jonathan Li, Y. Ahmet Sekerciođlu, Milosh Ivanovich, and Paul Fitzpatrick</i> Multi-objective Meta-heuristics for Scheduling Applications with High Availability Requirements and Cost Constraints in Multi-Cloud Environments <i>Marc Frincu and Ciprian Craciun</i> 	
Venue: Ballroom C	Cloud Computing & Future of Work Workshop (Session 2)
<ul style="list-style-type: none"> Future of Work Computing via Business and Technology Consulting (Keynote Talk) <i>Dr. Jean-Claude Franchitti (Cognizant Convergent Cloud Group)</i> Virtual Simulation and Augmented Interfaces for Business Models with focus on Banking and Retail <i>Biju Shoolapani and Parthasarathi Jinka</i> 	
3:30 PM – 4:00 PM	Afternoon Tea
4:00 PM – 5:30 PM	Panel – Ubiquitous Cloud Computing: Open Challenges, Innovation Opportunities, and Standards Gul Agha (Chair), University of Illinois at Urbana-Champaign, USA Dawn Leaf, US National Institute of Standards and Technology Albert Zomaya, Sydney University, Australia Bala Varadarajan, Fujitsu Australia Geng Lin, Dell
5:30 PM – 6:00 PM	Conference Closing by Chairs
7:00 PM – 10:00 PM	Social Program/Conference Dinner