

## Monday, December 7<sup>th</sup>

Registration/ Support Desk hours (08:00 - 13:00 & 14:00 - 17:00)				
	Panorama	Megaron B	Megaron Gamma	Atrium A
09:00 - 10:30	NetCloud 1	SD3C 1	T1	Doctoral Symposium
10:30 - 11:00	Coffee Break			
11:00 - 12:30	NetCloud 2	SD3C 2	T1	Cloud Challenge 1
12:30 - 14:00	Lunch Break			
14:00 - 15:30	CloudAM/CFM 1	BDSN 1	T2	Cloud Challenge 2
15:30 - 16:00	Coffee Break			
16:00 - 17:30	CloudAM/CFM 2	BDSN 2	T2	SCCTSA
18:30	Welcome Cocktail			

## Tuesday, December 8<sup>th</sup>

Registration/ Support Desk hours (08:30 - 13:00 & 14:00 - 17:00)				
09:00 - 09:30	Welcome and Opening Messages (Panorama)			
09:30 - 10:30	<b>Keynote 1 (Panorama)</b> Prof. Satish Narayana Srirama, University of Tartu, Estonia			
10:30 - 11:00	Coffee Break			
	Panorama	Megaron B	Megaron Gamma	Atrium A
11:00 - 12:30	UCC 1	UCC 2	T4	UCC 3
12:30 - 14:00	Lunch Break			
14:00 - 15:30	UCC 4	UCC 5	T4	T5
15:30 - 16:00	Coffee Break			
16:00 - 17:30	UCC 6	UCC 7	UCC 8	T5

Wednesday, December 9<sup>th</sup>

Registration/ Support Desk hours (08:30 - 13:00 & 14:00 - 17:00)				
09:00 - 10:00	<b>Keynote 2 (Panorama)</b> Prof. Rizos Sakellariou, University of Manchester, UK			
10:00 - 10:30	Presentations of the 2016 and 2017 bids for UCC/BDC (Panorama)			
10:30 - 11:00	Coffee Break			
	<b>Panorama</b>	<b>Megaron B</b>	<b>Megaron Gamma</b>	<b>Atrium A</b>
11:00 - 12:30	UCC 9	UCC 10	T6	T7
12:30 - 14:00	Lunch Break			
14:00 - 15:30	UCC 11	UCC 12	T6	T7
15:30 - 16:00	Coffee Break			
16:00 - 17:30	Panel (Panorama)			
19:00	Conference Dinner			

Thursday, December 10<sup>th</sup>

Registration/ Support Desk hours (08:30 - 13:00 & 14:00 - 17:00)				
08:00 - 08:50	<b>BDC Keynote (Panorama)</b> Dr. Ian Foster, University of Chicago and Argonne National Lab, United States			
	<b>Panorama</b>	<b>Megaron B</b>	<b>Megaron Gamma</b>	<b>Atrium A</b>
09:00 - 10:30	CloudSPD 1	CSMS	T3	BDC 1
10:30 - 11:00	Coffee Break			
11:00 - 12:30	CloudSPD 2	IWTCC 1	T3	BDC 2
12:30 - 14:00	Lunch Break			
14:00 - 15:30	Posters/Demo	IWTCC 2	UCC 13	BDC 3
15:30 - 16:00	Coffee Break			
16:00 - 17:30	WISARC	-	UCC 14	BDC 4

Registration/ Support Desk hours (08:00 - 13:00 & 14:00 - 17:00)	
09:00 -10:30	<p style="text-align: center;"><b>Panorama</b></p> <p><b>NetCloud 1</b> Chair: Yuri Demchenko</p> <ul style="list-style-type: none"> <li><b>Introduction: Workshop goal and community</b></li> <li><b>CYCLONE Unified Deployment and Management of Federated, Multi-Cloud Applications</b> Mathias Slawik, Begüm Ilke Zilci, Yuri Demchenko, José Ignacio Aznar Baranda, Robert Branchat, Charles Loomis(*), Oleg Lodygensky and Christophe Blanchet</li> <li><b>Enabling Automated Network Services Provisioning for Cloud Based Applications Using the Zero Touch Provisioning</b> Yuri Demchenko, Sonja Filiposka(*), Raimundas Tuminauskas, Anastas Mishev, Kurt Baumann, Damir Regvart and Tony Breach</li> <li><b>TE-Cast: Supporting General Broadcast/Multicast Communications in Virtual Networks</b> Keisuke Matsuo, Ryota Kawashima and Hiroshi Matsuo</li> </ul>
	<p style="text-align: center;"><b>Megaron B</b></p> <p><b>SD3C 1: Energy characterization</b> Chair: Deepak Mehta</p> <ul style="list-style-type: none"> <li><b>Keynote: Multi-objective VM Reassignment for Large Scale Data Centres</b> Takfarinas Saber and Anthony Ventresque</li> <li><b>Power Consumption of Virtualization Technologies: an Empirical Investigation</b> Roberto Morabito</li> </ul>
09:00 -10:30	<p style="text-align: center;"><b>Megaron Gamma</b></p> <p><b>T1: Business Process as a Service (BPaaS): A Model-Based Approach for Smart Business and IT-Cloud Alignment</b> Mr. Athanasios Tsitsipas, Mr. Nesat Efendioglu</p>
09:00 -10:30	<p style="text-align: center;"><b>Atrium A</b></p> <p><b>Doctoral Symposium</b> Chair: Kenneth Johnson</p> <ul style="list-style-type: none"> <li><b>(09:00) - Algorithmic strategies for Sensing-As-A-Service in the Internet-of-Things era</b> Soumi Chattopadhyay</li> <li><b>(09:25) - Online Marketing Research Based on Social Choice Theory and Cloud Computing</b> Li Li and Xiao-Jia Tang</li> <li><b>(09:50) - Securing Cryptographic Keys in the IaaS Cloud Model</b> Bushra Albelooshi, Khaled Salah, Thomas Martin and Ernesto Damiani</li> <li><b>(10:15) - Formal Methods in the Cloud</b> Kenneth Johnson</li> </ul>
	10:30 - 11:00
11:00 - 12:30	<p style="text-align: center;"><b>Panorama</b></p> <p><b>NetCloud 2</b> Chair: Sonja Filiposka</p> <ul style="list-style-type: none"> <li><b>Intercloud Control and Management Plane with XMPP</b> Peter Membrey and Yuri Demchenko(*)</li> <li><b>Tutorial: Tools for large scale cloud based applications deployment</b> Yuri Demchenko and Charles Loomis</li> <li><b>Round table discussion "Intercloud service delivery infrastructure: Technological, Operational and Policy aspects"</b></li> </ul>

	Megaron B
11:00 - 12:30	<p><b>SD3C 2: Energy management frameworks</b></p> <p>Chair: Barry O'Sullivan</p> <ul style="list-style-type: none"> <li>• <b>Trichotomic Search for Thermal-Aware Data Centre Workload Optimisation</b> Ignacio Castiñeiras, Danuta Sorina Chisca, Deepak Mehta(*) and Barry O'Sullivan</li> <li>• <b>Enhancing Energy-Efficient Cloud Management through Code Annotations and the Green Abstraction Layer</b> Raffaele Bolla, Luigi Sambolino, Danilo Tigano and Matteo Repetto</li> <li>• <b>The GENIC Architecture for Integrated Data Centre Energy Management</b> Dirk Pesch, Alan McGibney, Piotr Sobonski and Susan Rea</li> </ul>
	Megaron Gamma
11:00 - 12:30	<p><b>T1: Business Process as a Service (BPaaS): A Model-Based Approach for Smart Business and IT-Cloud Alignment</b></p> <p>Mr. Athanasios Tsitsipas, Mr. Nesat Efendioglu</p>
	Atrium A
11:00 - 12:30	<p><b>Cloud Challenge 1</b></p> <p>Chair: Vlado Stankovski</p> <ul style="list-style-type: none"> <li>• <b>Welcome to the Cloud Challenge</b></li> <li>• <b>Enabling Cloud Application Portability</b> Demetris Antoniadis, Nicholas Loulloudes, Athanasios Foudoulis, Chrystalla Sophokleous, Demetris Trihinas, George Pallis, Marios Dikaiakos and Harald Kornmayer</li> <li>• <b>Enhancing the Usability and Utilization of Accelerated Architectures via Docker</b> Nicholas Haydel, Sandra Gesing, Ian Taylor, Gregory Madey, Abdul Dakkak, Simon Garcia de Gonzalo and Wen-Mei Hwu</li> <li>• <b>Docker Containers Across Multiple Clouds and Data Centers</b> Moustafa Abdelbaky, Merve Unuvar, Javier Diaz-Montes, Malgorzata Steinder and Manish Parashar</li> </ul>
12:30 - 14:00	Lunch Break
	Panorama
14:00 - 15:30	<p><b>CloudAM/CFM 1</b></p> <p>Chair: Luiz Bittencourt</p> <ul style="list-style-type: none"> <li>• <b>Keynote: New Innovations in Cloud Computing for Big Data Applications</b> Professor Rajkumar Buyya</li> <li>• <b>Experimental Evaluation of the Cloud-Native Application Design</b> Sandro Brunner, Martin Blöchlinger, Giovanni Toffetti, Josef Spillner and Thomas Michael Bohnert.</li> <li>• <b>Clouds4Coordination: Managing Project Collaboration in Federated Clouds</b> Ioan Petri, Omer Rana, Tom Beach, Yacine Rezzgui and Andy Sutton</li> </ul>
	Megaron B
14:00 - 15:30	<p><b>BDSN 1</b></p> <p>Chair: Mohammad Al-Smadi</p> <ul style="list-style-type: none"> <li>• <b>Workshop Opening</b></li> <li>• <b>Ushio: Analyzing News Media and Public Trends in Twitter</b> Fangzhou Yao, Kevin Chang and Roy Campbell</li> <li>• <b>A Study of YouTube recommendation graph based on measurements and stochastic tools</b> Yonathan Portilla, Alexandre Reiffers-Masson, Eitan Altman and El-Azouzi Rachid</li> <li>• <b>Using Aspect-Based Sentiment Analysis to Evaluate Arabic News Affect on Readers</b> Mohammad Al-Smadi, Huda Al-Sarhan, Mahmoud Al-Ayyoub, Yaser Jararweh and Elhadj Benkhelifa</li> </ul>
	Megaron Gamma
14:00 - 15:30	<p><b>T2: CELAR: Automatic, Multi-grain elasticity provisioning for the Cloud</b></p> <p>Marios D. Dikaiakos, Nicholas Loulloudes, George Pallis, Hong-Linh Truong, Dimitrios Tsoumakos</p>

	Atrium A
14:00 - 15:30	<p><b>Cloud Challenge 2</b> Chair: Gregory Madey</p> <ul style="list-style-type: none"> <li>• <b>(CAT 1) Automated cloud brokerage based upon continuous real-time benchmarking</b> Thomas Connor and Joel Southgate</li> <li>• <b>(CAT 1) The Origin and Trustworthiness of Data in Smart City Applications</b> Aseel Alkhelaiwi and Dan Grigoras</li> <li>• <b>(CAT 2) Towards an Environment Supporting Resilience, High-Availability, Reproducibility and Reliability for Cloud Applications</b> Vlado Stankovski, Salman Taherizadeh, Ian Taylor, Andrew Jones, Carlo Mastroianni, Bruce Becker and Heru Suhartanto</li> <li>• <b>Cloud Challenge Awards and Prizes</b></li> </ul>
15:30 - 16:00	Coffee Break
	Panorama
16:00 - 17:30	<p><b>CloudAM/CFM 2</b> Chair: Rafael Tolosana</p> <ul style="list-style-type: none"> <li>• <b>An Analysis of the Voluntary Aspect in Cloud Federations</b> Márcio Assis and Luiz F. Bittencourt</li> <li>• <b>SLAM: SLA Monitoring Framework For Federated Cloud Services</b> Saadeldin Moustafa, Khalid Elgazzar, Patrick Martin and Marwa Elsayed</li> <li>• <b>Public-Private Cloud Federation Challenges</b> Boris Parák, David Wallom, Slávek Licehammer and Zdeněk Šustr</li> <li>• <b>Experiences in Building Micro-Cloud Provider Federation in the Guifi Community Network</b> Felix Freitag, Roger Baig, Leandro Navarro, Vladimir Vlassov, Agusti Moll and Roger Pueyo</li> </ul>
	Megaron B
16:00 - 17:30	<p><b>BDSN 2</b> Chair: Mohammad AL-Smadi</p> <ul style="list-style-type: none"> <li>• <b>Controlling the Katz-Bonacich Centrality in Social Network: Application to gossip in Online Social Networks</b> Alexandre Reiffers-Masson, Eitan Altman and Yezekael Hayel</li> <li>• <b>Using Big Data Analytics For Authorship Authentication of Arabic Tweets</b> Jafar Albadarneh, Bashar Talafha, Mahmoud Al-Ayyoub, Belal Zaqaibeh, Mohammad Al-Smadi, Yaser Jararweh and Elhadj Benkhelifa</li> </ul>
	Megaron Gamma
16:00 - 17:30	<p><b>T2: CELAR: Automatic, Multi-grain elasticity provisioning for the Cloud</b> Marios D. Dikaiakos, Nicholas Loulloudes, George Pallis, Hong-Linh Truong, Dimitrios Tsoumakos</p>
	Atrium A
16:00 - 17:30	<p><b>SCCTSA</b> Chair: Zaheer Khan</p> <ul style="list-style-type: none"> <li>• <b>Invited talk: Stakeholder Engagement in the Re-design of Urban Governance Systems</b> David Ludlow</li> <li>• <b>SmartEco: An Integrated Solution from Load Balancing between the Grid and Consumers to Local Energy Efficiency</b> Alexander Ditter, Dietmar Fey, Johannes Bürner and Jörg Franke</li> <li>• <b>Evaluation of High Density GPUs as Sustainable Smart City Infrastructure</b> Lei Shang and Muhammad Atif (*)</li> </ul>
18:30	Welcome Cocktail

Registration/ Support Desk hours (08:30 - 13:00 & 14:00 - 17:00)	
09:00 - 09:30	Welcome and Opening Messages ( <b>Panorama</b> )
09:30 - 10:30	<b>Keynote 1 (Panorama)</b> <i>Mobile Web and Cloud Services Enabling Internet of Things</i> Prof. Satish Narayana Srirama, University of Tartu, Estonia
10:30 - 11:00	Coffee Break
11:00 - 12:30	<b>Panorama</b>
	<b>UCC1: Storage &amp; Network Management</b> Chair: Khalid Elgazzar <ul style="list-style-type: none"> <li><i>Is Cloud Storage Ready? A Comprehensive Study of IP-based Storage Systems</i> Zhonghong Ou, Zhen-Huan Hwang, Antti Ylä-Jääski, Feng Chen and Ren Wang</li> <li><i>CloudSimDisk: Energy-Aware Storage Simulation in CloudSim</i> Baptiste Louis, Karan Mitra, Saguna Saguna and Christer Ahlund</li> <li><i>Domain Isolation in a Multi-Tenant Software-Defined Network</i> Alireza Ranjbar, Markku Antikainen and Tuomas Aura</li> </ul>
11:00 - 12:30	<b>Megaron B</b>
	<b>UCC2: Resource Allocation 1</b> Chair: George Pallis <ul style="list-style-type: none"> <li><i>Improving Resource Efficiency in Internet Cafés by Virtualization and Optimal User Allocation</i> Isaac Hamling, Michael O’Sullivan, Cameron Walker and Clemens Thielen</li> <li><i>Smart Shuffling in MapReduce: a solution to Balance Network Traffic and Workloads</i> Wei Shi, Yang Wang, Jean-Pierre Corriveau, Boqiang Niu, William L. Croft and Mengfei Peng</li> <li><i>Analysis and Evaluation of I/O Hypervisor Scheduling</i> Konstantinos Kontodimas, Panagiotis Kokkinos, Yossi Kuperman and Emmanouel Varvarigos</li> </ul>
11:00 - 12:30	<b>Megaron Gamma</b> <b>T4: High Performance Computational Experiments with Swift/T</b> Justin M Wozniak
11:00 - 12:30	<b>Atrium A</b>
	<b>UCC 3: Fault Tolerance and Reliability</b> Chair: Nagarajan Kandasamy <ul style="list-style-type: none"> <li><i>Prediction of Workloads in Incident Management based on Incident Ticket Updating History</i> Shinji Kikuchi</li> <li><i>A Multi-Objective ACS Algorithm to Optimize Cost, Performance, and Reliability in the Cloud</i> Adnan Ashraf, Benjamin Byholm and Ivan Porres</li> <li><i>Distributed cloud and de-centralized control plane. A proposal for scalable control plane for 5G</i> Amir Roozbeh</li> </ul>
12:30 - 14:00	Lunch Break
14:00 - 15:30	<b>Panorama</b>
	<b>UCC4: Resource Allocation 2</b> Chair: Nagarajan Kandasamy <ul style="list-style-type: none"> <li><i>A Negotiation-Based Resource Allocation Model in IaaS-Markets</i> Benedikt Pittl, Werner Mach and Erich Schikuta</li> <li><i>Towards a Multi-Objective VM Reassignment for Large Decentralised Data Centres</i> Takfarinas Saber, Anthony Ventresque, Ivona Brandic, James Thorburn and Liam Murphy</li> <li><i>Many-Objective Virtual Machine Placement for Dynamic Environments</i> Diego Ihara, Fabio López-Pires and Benjamín Barán</li> </ul>

	Megaron B
14:00 - 15:30	<b>UCC 5: Multi-tenancy &amp; Cloud Federation</b> Chair: Zaheer Khan <ul style="list-style-type: none"> <li>• <b>Middleware for Customizable Multi-staged Dynamic Upgrades of Multi-tenant SaaS Applications</b> Fatih Gey, Dimitri Van Landuyt and Wouter Joosen</li> <li>• <b>Adaptive Performance Isolation Middleware for Multi-tenant SaaS</b> Stefan Walraven, Wouter De Borger, Bart Vanbrabant, Bert Lagaisse, Dimitri Van Landuyt and Wouter Joosen</li> <li>• <b>SULTAN: A Composite Data Consistency Approach for SaaS Multi-Cloud Deployment</b> Islam Elgedawy</li> </ul>
	Megaron Gamma
14:00 - 15:30	<b>T4: High Performance Computational Experiments with Swift/T</b> Justin M Wozniak
	Atrium A
14:00 - 15:30	<b>T5: Market-Oriented Cloud Computing and Big Data Applications</b> Professor Dr. Rajkumar Buyya
15:30 - 16:00	Coffee Break
	Panorama
16:00 - 17:30	<b>UCC 6: Adaptation &amp; Policy 1</b> Chair: Zaheer Khan <ul style="list-style-type: none"> <li>• <b>Diversity: A Heuristic to Improve Robustness of Self-Adaptive Cloud Architectures</b> Franck Chauvel, Hui Song and Franck Fleurey</li> <li>• <b>PLAN: A Policy-Aware VM Management Scheme for Cloud Data Centres</b> Lin Cui, Posco Tso, Dimitrios Pezaros and Weijia Jia</li> <li>• <b>Efficient Online Performance Monitoring of Computing Systems using Predictive Models</b> Salvador Decelles, Nagarajan Kandasamy and Matthew Stamm</li> </ul>
	Megaron B
16:00 - 17:30	<b>UCC7: Resource Allocation 3</b> Chair: Rafael Tolosana <ul style="list-style-type: none"> <li>• <b>OS-Independent Live Migration Scheme for Bare-metal Clouds</b> Takaaki Fukai, Yushi Omote, Takahiro Shinagawa and Kazuhiko Kato</li> <li>• <b>QoS-driven probabilistic runtime evaluations of virtual machine placement on hosts</b> Diego Perez-Palacin, Raffaella Mirandola, Federico Monterisi and Andrea Montoli</li> <li>• <b>Cloud Orchestration Features: Are Tools Fit for Purpose?</b> Daniel Baur, Daniel Seybold, Frank Griesinger, Athanasios Tsitsipas, Christopher B. Hauser and Jörg Domaschka</li> </ul>
	Megaron Gamma
16:00 - 17:30	<b>UCC 8: Energy</b> Chair: George Pallis <ul style="list-style-type: none"> <li>• <b>A Fuzzy Logic-based Controller for Cost and Energy Efficient Load Balancing in Geo-distributed Data Centers</b> Adel Nadjaran Toosi and Rajkumar Buyya</li> <li>• <b>An energy aware application controller for optimizing renewable energy consumption in Cloud computing</b> Corentin Dupont, Mehdi Sheikhalishahi, Federico M. Facca and Fabien Hermenier</li> <li>• <b>Scheduling Live-Migrations for Fast, Adaptable and Energy-Efficient Relocation Operations</b> Vincent Kherbache, Fabien Hermenier and Eric Madelaine</li> </ul>
	Atrium A
16:00 - 17:30	<b>T5: Market-Oriented Cloud Computing and Big Data Applications</b> Professor Dr. Rajkumar Buyya

Registration/ Support Desk hours (08:30 - 13:00 & 14:00 - 17:00)	
09:00 - 10:00	<p><b>Keynote 2 (Panorama)</b></p> <p><b><i>Parallel Computing on the Cloud: from traditional execution time minimization to multiobjective optimization</i></b></p> <p>Prof. Rizos Sakellariou, University of Manchester, UK</p>
10:00 - 10:30	Presentations of the 2016 and 2017 bids for UCC/BDC ( <b>Panorama</b> )
10:30 - 11:00	Coffee Break
11:00 - 12:30	Panorama
	<p><b>UCC 9: Adaptation &amp; Policy 2</b></p> <p>Chair: Rafael Tolosana</p> <ul style="list-style-type: none"> <li>• <b><i>Adapting Scientific Workflows on Networked Clouds Using Proactive Introspection</i></b> Anirban Mandal, Paul Ruth, Ilya Baldin, Yufeng Xin, Claris Castillo, Gideon Juve, Mats Rynge, Ewa Deelman and Jeff Chase</li> <li>• <b><i>MapReduce over the Hybrid Cloud: a novel Infrastructure Management Policy</i></b> Daniela Loreti and Anna Ciampolini</li> <li>• <b><i>Biomorphic model for automated cloud adaptation</i></b> Gyorgi Stoykov and Anis Yazidi</li> </ul>
11:00 - 12:30	Megaron B
	<p><b>UCC 10: Economic Models 1</b></p> <p>Chair: Irene Kilanioti</p> <ul style="list-style-type: none"> <li>• <b><i>On the Feasibility of an Open-Implementation Cloud Infrastructure: A Game Theoretic Analysis</i></b> Charles A. Kamhoua, Anbang Ruan, Andrew Martin and Kevin A. Kwiat</li> <li>• <b><i>Bursting With Possibilities – an Empirical Study of Credit-Based Bursting Cloud Instance Types</i></b> Philipp Leitner and Joel Scheuner</li> <li>• <b><i>A Particle Swarm Optimization Approach for Workflow Scheduling on Cloud Resources Priced by CPU Frequency</i></b> Thiago Genez, Ilia Pietri, Rizos Sakellariou, Luiz F. Bittencourt and Edmundo Madeira</li> </ul>
11:00 - 12:30	<p>Megaron Gamma</p> <p><b>T6: Reliability in Cloud Computing Systems</b></p> <p>Dr. Bahman Javadi</p>
11:00 - 12:30	<p>Atrium A</p> <p><b>T7: Using the Cloud for Teaching and Research</b></p> <p>Khaled Salah</p>
12:30 - 14:00	Lunch Break
14:00 - 15:30	Panorama
	<p><b>UCC 11: Security</b></p> <p>Chair: Irene Kilanioti</p> <ul style="list-style-type: none"> <li>• <b><i>Stealth Databases: Ensuring User-Controlled Queries in Untrusted Cloud Environments</i></b> Josef Spillner, Martin Beck, Alexander Schill and Thomas Michael Bohnert</li> <li>• <b><i>Enforcing Security and Assurance Properties in Cloud Environment</i></b> Aline Bousquet, Briffaut Jeremy, Eddy Caron, Eva Maria Dominguez, Javier Franco, Arnaud Lefray, Oscar Lopez, Saioa Ros, Jonathan Rouzaud-Cornabas, Christian Toinard and Mikel Uriarte</li> <li>• <b><i>An Efficient and Privacy-preserving Similarity Evaluation For Big Data Analytics</i></b> Zakaria Gheid and Yacine Challal</li> </ul>



	Megaron B
14:00 - 15:30	<p><b>UCC 12: Economic Model</b></p> <p>Chair: Alan Sill</p> <ul style="list-style-type: none"> <li>• <b><i>A Deadline Constrained Critical Path Heuristic for Cost-effectively Scheduling Workflows</i></b> Vahid Arabnejad, Kris Bubendorfer, Bryan Ng and Kyle Chard</li> <li>• <b><i>Agent-based Modelling as a Service on Amazon EC2: Opportunities and Challenges</i></b> Mariam Kiran, Haroon Mir, Bashir Mohammed, Ashraf Al-Ou’N and Kabiru Maiyama</li> <li>• <b><i>Customized Cloud Service Quality: Approaching Pareto-Efficient Outcomes in Concurrent Multiple-Issue Negotiations</i></b> Melanie Holloway, Dieter Schuller and Ralf Steinmetz</li> </ul>
	Megaron Gamma
14:00 - 15:30	<p><b>T6: Reliability in Cloud Computing Systems</b></p> <p>Dr. Bahman Javadi</p>
	Atrium A
14:00 - 15:30	<p><b>T7: Using the Cloud for Teaching and Research</b></p> <p>Khaled Salah</p>
15:30 - 16:00	Coffee Break
	Panorama
16:00 - 17:30	<p><b>Panel: Encouraging International Cooperation in Utility and Cloud Computing</b></p> <p>Chair: Alan Sill</p>
19:00	Conference Dinner

Registration/ Support Desk hours (08:30 - 13:00 & 14:00 - 17:00)	
08:00 - 08:50	<p><b>BDC Keynote (Panorama)</b>  <b><i>Accelerating discovery via science services</i></b>                      Dr. Ian Foster, University of Chicago and Argonne National Lab, United States</p>
	Panorama
09:00 - 10:30	<p><b>CloudSPD 1</b>                      Chair: Gregoris Mentzas</p> <ul style="list-style-type: none"> <li>• <b><i>A Survey on Context Security Policies in the Cloud</i></b>                          Yiannis Verginadis, Gregoris Mentzas, Simeon Veloudis and Iraklis Paraskakis</li> <li>• <b><i>Privacy Preserving Attribute Based Encryption for Multiple Cloud Collaborative Environment</i></b>                          Nikos Komninos and Aisha Kanwal Junejo</li> <li>• <b><i>Conceptualized Policy Design for User-Regulated Trusted Clouds</i></b>                          Joerg Kebbedies(*), Josef Spillner, Iris Braun and Alexander Schill</li> </ul>
	Megaron B
09:00 - 10:30	<p><b>CSMS</b>                      Chair: Enver Ever</p> <ul style="list-style-type: none"> <li>• <b>Technical talk by the session chairs</b></li> <li>• <b><i>Analytical Modelling and Performability Analysis for Cloud Computing Using Queuing System</i></b>                          Yonal Kirsal, Yoney Kirsal Ever, Leonardo Mostarda and Orhan Gemikonakli</li> <li>• <b><i>Job Classification in Cloud Computing: The Classification Effects on Energy Efficiency</i></b>                          Auday Aldulaimy, Rached Zantout, Ahmed Zekri and Wassim Itani</li> </ul>
	Megaron Gamma
09:00 - 10:30	<p><b>T3: Collaborative Sharing of Cloud Hosted Structured Data</b>                      Krishna Kant</p>
	Atrium A
09:00 - 10:30	<p><b>BDC1: Big Data Infrastructure</b>                      Chair: Maciej Malawski</p> <ul style="list-style-type: none"> <li>• <b>(09:00) - <i>Alleviation of Disk I/O Contention in Virtualized Settings for Data-Intensive Computing</i></b>                          Matthew Malensek, Sangmi Pallickara and Shrideep Pallickara</li> <li>• <b>(09:30) - <i>FaBRiQ: Leveraging Distributed Hash Tables towards Distributed Publish-Subscribe Message Queues</i></b>                          Iman Sadooghi, Ke Wang, Shiva Srivastava, Dharmmit Patel, Dongfang Zhao, Tonglin Li and Ioan Raicu</li> <li>• <b>(10:00) - <i>Towards a Hybrid Imputation Approach Using Web Tables</i></b>                          Ahmad Ahmadov, Maik Thiele, Julian Eberius, Wolfgang Lehner and Robert Wrembel</li> </ul>
10:30 - 11:00	Coffee Break
	Panorama
11:00 - 12:30	<p><b>CloudSPD 2</b>                      Chair: Yiannis Verginadis</p> <ul style="list-style-type: none"> <li>• <b><i>Towards secure SDN policy management</i></b>                          Nicolae Paladi</li> <li>• <b><i>Distributed and Encrypted Data in Multi-Tenant Cloud-Based CRM Solutions</i></b>                          Julia Vuong and Simone Braun</li> <li>• <b><i>Towards Trusted eHealth Services in the Cloud</i></b>                          Antonis Michalas and Rafael Dowsley</li> </ul>

11:00 - 12:30	<p style="text-align: center;"><b>Megaron B</b></p> <p><b>IWTCC 1</b> Chair: Abir Awad</p> <ul style="list-style-type: none"> <li>• <b>Authentication and Authorization in FELIX</b> Umar Toseef and Kostas Pentikousis</li> <li>• <b>Authorising contract based access to personal data in the cloud</b> Kaniz Fatema, Dave Lewis and Declan O’Sullivan</li> <li>• <b>Efficient update of encrypted files for cloud storage</b> Andrea Miele and Youssef El Houti</li> </ul>
11:00 - 12:30	<p style="text-align: center;"><b>Megaron Gamma</b></p> <p><b>T3: Collaborative Sharing of Cloud Hosted Structured Data</b> Krishna Kant</p>
11:00 - 12:30	<p style="text-align: center;"><b>Atrium A</b></p> <p><b>BDC2: Big Data Applications</b> Chair: Bahman Javadi</p> <ul style="list-style-type: none"> <li>• <b>(11:00) - An Empirical Approach to Detection of Topic Bubbles in Tweets</b> Ashwin Kumar Thandapani Kumarasamy and K.M. George</li> <li>• <b>(11:30) - Building the Dresden Web Table Corpus: A Classification Approach</b> Julian Eberius, Katrin Braunschweig, Markus Hentsch, Maik Thiele, Ahmad Ahmadov and Wolfgang Lehner</li> <li>• <b>(12:00) - Big Data Remote Access Interfaces for Light Source Science</b> Justin Wozniak, Kyle Chard, Ben Blaiszik, Ray Osborn, Michael Wilde and Ian Foster</li> </ul>
12:30 - 14:00	<p style="text-align: center;">Lunch Break</p>
14:00 - 15:30	<p style="text-align: center;"><b>Panorama</b></p> <p><b>Posters/ Demo</b> <i>You will find your poster number below and on the respective poster boards. Please put up your posters before the start of poster session. You must take your poster down at the end of the day. Posters not taken down at the end of the day will be recycled.</i></p> <ol style="list-style-type: none"> <li>1. <b>PRACTISE - Demonstrating a neural network based framework for robust prediction of data center workload</b> Thomas Scherer, Ji Xue, Yan Feng, Robert Birke, Lydia Y. Chen and Evgenia Smi</li> <li>2. <b>Multiclouds Tournament Blueprint</b> Marcio Assis and Luiz F. Bittencourt</li> <li>3. <b>A Distributed File System with Storage-Media Awareness</b> Herodotos Herodotou</li> <li>4. <b>Integrating real and digital games with data analytics for water consumption behavioral change: a demo</b> Piero Fraternali, Giorgia Baroffio, Chiara Pasini, Luca Galli, Isabel Micheel, Jasminko Novak and Andrea Emilio Rizzoli</li> <li>5. <b>High quality media streaming over long-distance network using FELIX experimental facility</b> Lukasz Ogrodowczyk, Bartosz Belter and Szymon Malewski</li> <li>6. <b>Support for Scientific Workflows in a Model-based Cloud Platform</b> Maciej Malawski, Bartosz Balis, Kamil Figiela, Maciej Pawlik and Marian Bubak</li> <li>7. <b>hpNFS: A Hierarchical Approach for the Parallel Network File System</b> Hsin Tse Lu, Po Hsuan Wu, Chia Hung Kao and Yi Hsuan Lee</li> <li>8. <b>Business Continuity Planning with FELIX</b> Atsuko Takefusa, Jason Haga, Umar Toseef, Takatoshi Ikeda, Tomohiro Kudoh, Jin Tanaka and Kostas Pentikousis</li> <li>9. <b>A Process Model for Customisation of Software in Multi-Tenant SaaS Model</b> Khaled Khan, Armstrong Nhlabatsi and Md Niamul Haque Khan</li> <li>10. <b>Power Constrained Workflow Scheduling on VMs</b> David Shepherd, Ilija Pietri and Rizos Sakellariou</li> <li>11. <b>When IT meets Telco : RAN as a Service</b> Abdelkader Outtagarts, Laurent Rouillet, Bruno Mongazon-Cazavet and Gopalasingham Aravinthan</li> <li>12. <b>Towards Citizen Community Clouds in Guifi.net</b> Felix Freitag, Roger Baig, Agusti Moll, Roger Pueyo Centelles, Leandro Navarro and Vladimir Vlassov</li> </ol>

14:00 - 15:30	<p style="text-align: center;"><b>Megaron B</b></p> <p><b>IWTCC 2</b> Chair: Abir Awad</p> <ul style="list-style-type: none"> <li>• <b><i>Vehicular Cloud Networks: Architecture, Applications and Security Issues</i></b> Farhan Ahmad(*), Muhammad Kazim, Asma Adnane and Abir Awad</li> <li>• <b><i>Towards Secure Provenance in the Cloud: A Survey</i></b> Brian Lee(*), Abir Awad and Mirna Awad</li> <li>• <b><i>Scheduling Workflows under Authorization Control</i></b> Nadeem Chaudhary and Alghamdi Mohammad</li> </ul>
14:00 - 15:30	<p style="text-align: center;"><b>Megaron Gamma</b></p> <p><b>UCC 13: Applications 1</b> Chair: Ashiq Anjum</p> <ul style="list-style-type: none"> <li>• <b><i>Using the Cloud to Teach Computer Networks</i></b> Khaled Salah and Mhd Wael Bazzaza</li> <li>• <b><i>Enabling Big Data Analytics in the Hybrid Cloud using Iterative MapReduce</i></b> Francisco J. Clemente-Castelló, Bogdan Nicolae, Kostas Katrinis, M. Mustafa Rafique, Rafael Mayo, Juan Carlos Fernández and Daniela Loreti</li> <li>• <b><i>Socially-Aware Multimedia Content Delivery for the Cloud</i></b> Irene Kilanioti and George Papadopoulos</li> </ul>
14:00 - 15:30	<p style="text-align: center;"><b>Atrium A</b></p> <p><b>BDC3: Machine Learning and Data Analytics</b> Chair: Felix Freitag</p> <ul style="list-style-type: none"> <li>• <b><i>(14:00) - Conformal Prediction in Spark: Large-Scale Machine Learning with Confidence</i></b> Marco Capuccini, Lars Carlsson, Ulf Norinder and Ola Spjuth</li> <li>• <b><i>(14:30) - Shock: Active Storage for Multi-cloud Streaming Data Analysis</i></b> Jared Bischof, Andreas Wilke, Wolfgang Gerlach, Travis Harrison, Tobias Paczian, Wei Tang, Jared Wilkening, Narayan Desai and Folker Meyer</li> <li>• <b><i>(14:50) - A Unified Computation Engine for Big Data Analytics</i></b> Chenyang Xu, Yanjie Chen, Weixiong Rao, Hong Min and Gong Su</li> <li>• <b><i>(15:10) - Linked 'Big' Data: Towards a manifold increase in Big Data Value and Veracity</i></b> Jeremy Debattista, Christoph Lange, Simon Scerri and Soren Auer</li> </ul>
15:30 - 16:00	<p style="text-align: center;">Coffee Break</p>
16:00 - 17:30	<p style="text-align: center;"><b>Panorama</b></p> <p><b>WISARC</b> Chair: Diogo Fernandes</p> <ul style="list-style-type: none"> <li>• <b><i>Dog ORAM: A Distributed and Shared Oblivious RAM Model with Server Side Computation</i></b> Alexandre Pujol and Christina Thorpe</li> <li>• <b><i>CloudHoneyCY - An Integrated Honey-pot Framework for Cloud Infrastructures</i></b> Harald Gjermundrod and Ioanna Dionysiou</li> </ul>
16:00 - 17:30	<p style="text-align: center;"><b>Megaron Gamma</b></p> <p><b>UCC 14: Applications 2</b> Chair: Khalid Elgazzar</p> <ul style="list-style-type: none"> <li>• <b><i>Towards power consumption modeling for servers at scale</i></b> Timothy W. Harton, Cameron Walker and Michael O'sullivan</li> <li>• <b><i>Business-Oriented Evaluation of the PaaSage Platform: A Case Study in the Financial Sector</i></b> Achilleas Achilleos, Georgia Kapitsaki, Geir Horn and George Papadopoulos</li> <li>• <b><i>Performance Study of Cloud Computing Back-end Solutions For Mobile Applications</i></b> Guilherme Macedo, Christina Thorpe and John Murphy</li> </ul>

**BDC4: Scalability & Middleware**

Chair: Anirban Mandal

16:00 - 17:30

- **(16:00) - *Policy-driven Data Management Middleware for Multi-cloud Storage in Multi-tenant SaaS***  
Ansar Rafique, Dimitri Van Landuyt, Bert Lagaisse and Wouter Joosen
- **(16:20) - *Any Data, Any Time, Anywhere: Global Data Access for Science***  
Kenneth Bloom, Tommaso Boccali, Brian Bockelman, Daniel Bradley, Sridhara Dasu, Jeff Dost, Federica Fanzago, Igor Sfiligoi, Alja Mrak Tadel, Matevz Tadel, Carl Vuosalo, Frank Wurthwein, Avi Yagil and Marian Zvada
- **(16:40) - *Assessing Process Discovery Scalability in Data Intensive Environments***  
Sergio Hernandez, Sebastiaan J. van Zelst, Joaquin Ezpeleta and Wil van der Aalst
- **(17:00) - *Closing Remarks***