

Day 1: September 18, Monday (Workshops and Tutorials)					
Time	Location	Session Type	Session Title	Speakers	Description
8:00 - 17:00	TBD	Registration	Registration Desk		Please check in at our registration desk to pick up your name badge and for on-site registration
9:00 - 17:30	TBD	Concurrent Breakout Sessions	Doctoral Symposium	Keynote Speaker: H.J. Siegel, Colorado State University	
9:00 - 15:30		Concurrent Breakout Sessions	Automation of Cloud Configuration and Operations (ACCO) Workshop	1) Workflow Automation for Partially Hosted Cloud Services, Hanin Abubaker and Khaled Salah 2) BDLaas: Big Data Lab as a Service for Experimenting Big Data Solution, Yehia Taher, Rafiqul Haque and Mohand-Said Hacid 3) Autonomic Cross-Layer Management of Cloud Resources Framework, Cihan Tunc, Farah Fargo, Youssif Al-Nashif and Salim Hariri 4) Autonomic Fail Detection Systems, Ahmet Turan Ozdemir, Cihan Tunc and Salim Hariri 5) Enabling Multi-level Data Fault Tolerance on Software-Defined Storage System, Shuo-Han Chen, Chang Yung-Chun, Tseng-Yi Chen, Tsan-Sheng Hsu, Hsin-Wen Wei and Wei-Kuan Shih 6) Into the Storm: Describing Optimal Configurations using Genetic Algorithms and Bayesian Optimization, Michael Trotter, Grace Liu and Timothy Wood 7) A Host-Agnostic, Supervised Machine Learning Approach to Automated Overload Detection in Virtual Machine Workloads, Eli Dow and Jeanna Matthews 8) An incremental approach to data integration in presence of access control policies, Mokhtar Sellami, Mohand-Said Hacid and Mohamed Mohsen Gammoudi	
9:00 - 17:30		Concurrent Breakout Sessions	2nd eCAS Workshop on Engineering Collective Adaptive Systems (eCAS 2017)		
10:30 - 11:00		Coffee Break			
11:00 - 17:30		Concurrent Breakout Sessions	1st Workshop on Autonomic Management of Large Scale Container-based Systems (AMLCs)	1) FID-A Faster Image Distribution System For Docker Platform, Kangjin Wang, Yong Yang, Ying Li, Hanmei Luo and Lin Ma 2) In Search of the Ideal Storage Configuration for Docker Containers, Vasily Tarasov, Lukas Rupprecht, Dimitrios Skourtis, Amit Warke, Dean Hildebrand, Mohamed Mohamed, Nagapramod Mandagere, Wenji Li, Ming Zhao and Raju Rangaswami 3) Auto-scaling of containers: the impact of relative and absolute metrics, Emiliano Casalicchio and Vanessa Percibali 4) Quality of Service models for Micro-services and their integration into the SWITCH IDE, Polona Stefanić, Matej Cigale, Andrew Jones and Vlado Stankovski 5) SWITCHing from multi-tenant to event-driven videoconferencing services, Jernej Trnkoczy, Uroš Paščinski, Sandi Gec and Vlado Stankovski	
12:30 - 14:00		Luncheon	Lunch		
14:00 - 17:30		Concurrent Breakout Sessions	International Workshop on Autonomic Systems for Big Data Analytics (ASBDA 2017)	1) Integrating Short History for Improving Clustering Based Network Traffic Anomaly Detection, Philippe Owezarski and Juliette Dromard 2) Tracing Distributed Data Stream Processing Systems, Zoltán Zvara, Péter Szabó, Gábor Hermann and Andras A. Benczur 3) Fraud Analysis Approaches in the Age of Big Data - A Review of State of the Art, Sara Makki, Rafiqul Haque, Yehia Taher, Zainab Assaghir, Gregory Ditzler, Mohand-Said Hacid and Hassan Zeineddine	
14:00 - 17:30		Concurrent Breakout Sessions	3rd International Workshop on Data-driven Self-regulating Systems (DSS 2017)		
18:00 - 20:00	The University of Arizona, Student Union	Welcoming Event	Welcome Reception		

Day 1

Day 2

Day 2: September 19, Tuesday (ICCAC 2017 and SASO 2017)					
Time	Location	Session Type	Session Title	Speakers	Description
8:00 - 17:00		Registration	Registration Desk		Please check in at our registration desk to pick up your name badge and for on-site registration
9:00 - 9:30		Welcoming Event	Welcome Address by ICCAC and SASO Chairs		
9:30 - 10:30		Plenary Session	Keynote 1	Prof. Geoffrey West, Santa Fe Institute, USA	"The Simplicity and Unity Underlying the Complexity of Life from Growth and Innovation to Mortality, Sustainability and the Pace of Life in Organisms, Cities and Companies"
10:30 - 11:00		Coffee Break			
11:00 - 12:30		Concurrent Breakout Sessions	ICCAC Session 1: Autonomic Cloud Computing - I	1) A Black-box Approach for Detecting Systems Anomalies in Virtualized Environments, Olumuyiwa Ibidunmoye, Ewnetu Bayuh Lakew and Erik Elmroth 2) An Autonomic Cloud Application Placement Tool Based on Cost Criteria, Nabil Abdennadher 3) Towards Designing Cost-Optimal Policies to Utilize IaaS Clouds under Online Learning, Xiaohu Wu, Patrick Loiseau and Esa Hyttia	
11:00 - 12:30		Concurrent Breakout Sessions	SASO Session 1: Networks	1) Self-organized Coverage Optimisation in Smart Camera Networks, Lukas Esterle 2) Self-stabilising target counting in wireless sensor networks using Euler integration, Danilo Pianini, Mirko Viroli, and Simon Dobson 3) PacketSkip: Skip Graph for Multidimensional Search in Structured Peer-to-Peer Systems, Andreas Disterhöft, Andreas Funke, and Kalman Graff	
12:30- 14:00		Luncheon	Lunch		
14:00 - 15:30		Plenary Session	Panel	Moderator: H.J. Siegel, Colorado State University	<b>Panel Title:</b> Digital Convergence: What Academic Cloud, Autonomic, Self-Adaptive, and Self-Organizing Research is Useful for Industry in the Short and Long Term? <b>Panelists:</b> • Ilkay Altintas, University of California at San Diego • Fredricka Darema, US AFOSR (Air Force Office of Scientific Research) • Salima Hassas, University of Lyon • Heiko Ludwig, IBM Almaden • Naveen Sharma, Rochester Institute of Technology • Conrad S. Tucker, The Atlantic Council
16:00 - 17:30		Plenary Session	Posters, Demos, and Reception		

Day 3

Day 3: September 20, Wednesday (ICCAC 2017 and SASO 2017)					
Time	Location	Session Type	Session Title	Speakers	Description
9:00 - 17:00		Registration	Registration Desk		Please check in at our registration desk to pick up your name badge and for on-site registration
9:30 - 10:30		Plenary Session	Keynote 2	<b>Dr. Lalit K. Mestha, Principal Engineer, GE Global Research, New York, USA</b>	"Industrial Immune Response to Cyberattacks - Is this even possible?"
10:30 - 11:00		Coffee Break			
11:00 - 12:30		Concurrent Breakout Sessions	<b>ICCAC Session 2: Autonomic Cloud Computing - II</b>	1) 2TL: a Scheduling Algorithm for Meeting the Latency Requirements of Bursty I/O Streams at User-Specified Percentiles, Yipkei Kwok, Patricia Teller and Sarala Arunagiri 2) Escada: Predicting Virtual Machine Network Bandwidth Demands for Elastic Provisioning in IaaS Clouds, Jonatas A Marques and Rafael R Obelheiro 3) Analysis and Autonomic Elasticity Control for Multi-Server Queues Under Traffic Surges, Venkat Tadakamalla and Daniel Menasce	
11:00 - 12:30		Concurrent Breakout Sessions	<b>SASO Session 2: Organizations and Institutions</b>	1) Interactional Justice and Self-Governance of Open Self-Organising Systems. Jeremy Pitt 2) A Requirements Model for Adaptive Multi-Organizational Systems, Mahmut Tamersoy, Erdem Eser Ekinci, R. Cenk Erdur, and Oguz Dikenelli	
12:30 - 14:00		Luncheon	Lunch		
14:00 - 15:30		Concurrent Breakout Sessions	<b>ICCAC Session 3: Autonomic Aspects of Cloud, Fog and Edge Computing</b>	1) A Cloud-assisted Tree-based P2P System for Low Latency Streaming, Lucas Provensi, Frank Eliassen and Roman Vitenberg 2) Autonomic Identity Framework for the Internet of Things, Xiaoyang Zhu, Youakim Badr, Jesus Pacheco and Salim Hariri	
14:00 - 15:30		Concurrent Breakout Sessions	<b>SASO Session 3: Resource and Network Management</b>	1) Xor-Based Topology Management Beyond Kademlia, Erick Lavoie, Miguel Correia, and Laurie Hendren 2) Resource Adaptation via Test-Based Software Minimization, Arpit Christl, Alex Groce, and Rahul Gopinath 3) Self-Adaptive Safe Provisioning of Wireless Power using DCOPs, Coen van Leeuwen, Sinan Yildirim, and Przemyslaw Pawelczak	
15:30 - 16:00		Coffee Break			
16:00 - 17:30		Concurrent Breakout Sessions	<b>ICCAC Session 4: Self-Protection Techniques of Computing Systems, Networks and Applications</b>	1) SDR-based Resilient Wireless Communication, Firas Almoualem, Pratik Satam, Jang-Geun Ki and Salim Hariri 2) Autoinfotainment Security Development Framework (ASDF) for Smart Cars, Pratik Satam, Jesus Pacheco and Salim Hariri 3) A Self-Protection Agent using Error Correcting Output Codes to Secure Computers and Applications, Fabian De La Pena Montero, Salim Hariri and Gregory Ditzler	
19:00	Old Tucson	Conference Dinner			Old Tucson is a movie studio and theme park just west of Tucson, Arizona, adjacent to the Tucson Mountains and close to the western portion of Saguaro National Park. It was original built in 1939 by Columbia Pictures on a Pima County-owned site as a replica of 1860's Tucson for the movie Arizona, starring William Holden and Jean Arthur. <a href="http://oldtucson.com/">http://oldtucson.com/</a>

Day 4

Day 4: September 21, Thursday (ICCAC 2017 and SASO 2017)					
Time	Location	Session Type	Session Title	Speakers	Description
9:30 - 10:30		Plenary Session	Keynote 2	-- Prof. David Garlan, Carnegie Mellon University, USA	"Human-machine synergy: Bringing humans and autonomy into balance"
10:30 - 11:00		Coffee Break			
11:00 - 12:30		Concurrent Breakout Sessions	<b>ICCAC Session 5: Autonomic Computing Systems, Tools and Applications - I</b>	1) Runtime modifications of Spark data processing pipelines, Elena Lazovik, Michel Medema, Toon Albers, Erik Langius and Alexander Lazovik 2) Efficient Collaborative Approximation in MapReduce Without Missing Rare Keys, Nitin, Mithuna Thottethodi, T N Vijaykumar and Milind Kulkarni 3) Autonomic Management of 3D Cardiac Simulations, Ehsan Esmaili, Ali Akoglu, Gregory Ditzler, Salim Hariri, Jeno Szep and Talal Moukabary	
11:00 - 12:30		Concurrent Breakout Sessions	<b>SASO Session 5: Fundamentals of Self-Adaptation</b>	1) Edge Detection in Static and Dynamic Environments using Robot Swarms, Yara Khaluf 2) Compositional Blocks for Optimal Self-Healing Gradients, Giorgio Audrito, Roberto Casadei, Ferruccio Damiani, and Mirko Virgili 3) Multi-level control mechanisms for non-structured and structured 2-dimensional self-assembling, Ciprian Paduraru, Radu Mincu, and Gheorghe Stefanescu	
12:30 - 14:00		Luncheon	Lunch		
14:00 - 15:30		Concurrent Breakout Sessions	<b>ICCAC Session 6: Autonomic Computing Systems, Tools and Applications - II</b>	1) Value-Based Scheduling for Oversubscribed Power-Constrained Homogeneous HPC Systems, Nirmal Kumbhare, Cihan Tunc, Dylan Machovec, Ali Akoglu, Salim Hariri and Howard Jay Siegel 2) Application-Specific Autonomic Cache Tuning for General Purpose GPUs, Sam Gianelli, Edward Richter, Diego Jimenez, Hugo Valdez, Tosiron Adegbija and Ali Akoglu 3) Design Framework for Reliable Multiple Autonomic Loops in Smart Environments, Adja Ndeye Sylla, Maxime Louvel, Eric Rutten and Gwenael Delaval	
14:00 - 15:30		Concurrent Breakout Sessions	<b>SASO Session 6: Fundamentals of Self-Adaptation</b>	1) Decentralized Coordination of Adaptations in Distributed Self-Adaptive Software Systems, Martin Weißbach, Philipp Chrszon, Thomas Springer, and Alexander Schill 2) Embedding Verification Concerns in Self-Adaptive System Code, Sharmin Jahan, Allen Marshall, and Rose Gamble 3) Identifying Self-Organization and Adaptability in Complex Adaptive Systems, Lachlan Birdsey, Claudia Szabo, and Katrina Falkner	
15:30 - 16:00		Coffee Break			
16:00 - 17:30		Concurrent Breakout Sessions	<b>ICCAC Session: Dynamic Data Driven Application Systems</b>	1) Cybersecurity Policies and their Impact on Dynamic Data Driven Application Systems, Conrad Tucker, Mathew Burrows, Kevin Lesniak and Samuel Klein 2) Pulsar: Enabling Dynamic Data-driven IoT Applications, Eduard Renart, Daniel Balouek-Thomert and Manish Parashar 3) DDDAMS-based Border Surveillance and Crowd Control via Aerostats, UAVs, and Ground Sensors, Seunghan Lee, Sara Minaeian, Yifei Yuan, Jian Liu and Young-Jun Son 4) Resilient Dynamic Data Driven Application Systems as a Service (rDaaS): A Design Overview, Cihan Tunc, Salim Hariri and Youakim Badr 5) High Performance Machine Learning (HPML) Framework to Support DDDAS Decision Support Systems: Design Overview, Gregory Ditzler, Salim Hariri and Ali Akoglu	
17:30 - 18:00		Closing Session			

Day 5: September 22, Friday (Workshops and Tutorials)				
Time	Location	Session Type	Session Title	Description
9:00 - 17:30		Concurrent Breakout Sessions	<b>The 1st International Workshop on Autonomics and Cloud Security (ACS) + PUF</b>	1) A Scattering Technique for Protecting Cryptographic Keys in the Cloud, Khaled Salah 2) Cognitive Cyber Security Assistant: Design Overview, Carla Sayan, Salim Hariri and George Ball 3) Real-time IRC Threat Detection Framework, Sicong Shao, Cihan Tunc, Pratik Satam and Salim Hariri 4) Cloud Computing Security Automation Framework, Cihan Tunc, Salim Hariri, Mheni Merzouki, Charif Mahmoudi, Frederic J. de Vault, Jaafar Chbili, Robert Bohn and Abdella Battou 5) Enabling Risk Management for Smart Infrastructures with an Anomaly Behavior Analysis Intrusion Detection System, Jesus Pacheco, Xiaoyang Zhu, Youakim Badr and Salim Hariri 6) Identifying the Cyber Attack Origin with Partial Observation: A Linear Regression Based Approach, Mohammed Lalou, Hamamache Kheddouci and Salim Hariri 7) AnomalyDetect: A System for Detecting Anomalies in Cloud Services, Mamadou Diallo, Michael August, Scott Slayback, Christopher Graves and Dillon Glasser
9:00 - 17:30		Concurrent Breakout Sessions	<b>4th International Workshop on Self-Improving System Integration (SISSY 2017)</b>	
9:00 - 17:30		Concurrent Breakout Sessions	<b>Fifth International Workshop on Self-Adaptive and Self-Organising Socio-Technical Systems (SASO-ST 2017)</b>	
9:00 - 17:30		Concurrent Breakout Sessions	<b>Tutorial</b>	Aggregate Programming
10:30 - 11:00		Coffee Break		
11:00 - 17:30		Concurrent Breakout Sessions	<b>The 5th International Workshop on Autonomic Management of high performance Grid and Cloud Computing (AMGCC'17)</b>	1) Analysis of Service-oriented DBMS Organization, Woong Sul, H.Young Yeom and Hyungsoo Jung 2) A Case Study of leveraging High-Throughput Distributed Message Queue System for Many-Task Computing on Hadoop, Cao Nguyen, Jik-Soo Kim, Jaehwan Lee and Soonwook Hwang 3) Performance Optimization of Communication Subsystem in Scale-out Distributed Storage, Useok Song, Bodon Jeong, Sungyong Park and Kwonyong Lee 4) OMBM: Optimized memory bandwidth management for strict QoS and high server utilization, Hanul Sung, Jeessoo Min, Sujin Ha and Hyeonsang Eom 5) ZonFS: A Storage Class Memory File System with Memory Zone Partitioning on Linux, Jang Woong Kim, Jae-Hoon Kim, Awaiz Khan, Youngjae Kim and Sungyong Park 6) SUPERMAN: A Novel System for Storing and Retrieving Scientific-Simulation Provenance for Efficient Job Executions on Computing Clusters, Young-Kyoon Suh and Jin Ma 7) A Study on Optimal Scheduling using High-Bandwidth Memory of Knights Landing Processor, Seungwoo Rho, Geunchul Park, Jiksoo Kim, Seoyoung Kim and Dukyun Nam 8) A Hybrid Cloud Resource Clustering Method using Analysis of Application Characteristics, Yoon Oh and Yoonhee Kim
12:30 - 14:00		Luncheon	Lunch	
15:30 - 16:00		Coffee Break		