

FAS* 2017



FAS* Foundations and Applications of Self* Systems (FAS* 2017)

**11th IEEE International
Conference on Self-Adaptive
and Self-Organizing Systems
(SASO 2017)**

**2017 IEEE International
Conference on Cloud and
Autonomic Computing
(ICCAC 2017)**

The University of Arizona, Tucson, AZ, USA, September 18-22, 2017

FAS* 2017



MONDAY, SEPTEMBER 18, 2017

8:00 AM – 5:00 PM - REGISTRATION - Diamond Atrium

PLEASE CHECK IN TO PICK UP YOUR NAME BADGE AND FOR ON-SITE REGISTRATION

9:00 AM – 10:30 AM - CONCURRENT BREAKOUT SESSIONS

North Ballroom	Doctoral Symposium (Session I)	Moderator: Gregory Ditzler, The University of Arizona Intro + Welcome Students: Gilles Neyens Oliver Kosak Sam Hess Ashutosh Pandey
Santa Rita	Automation of Cloud Configuration and Operations (ACCO) Workshop (Session I)	Keynote Speaker: Abdella Battou, NIST Topic: "Cloud is the future" 1) "Workflow Automation for Partially Hosted Cloud Services," Hanin Abubaker and Khaled Salah 2) "BDaaS: Big Data Lab as a Service for Experimenting Big Data Solution," Yehia Taher, Rafiqul Haque and Mohand-Said Hacid
South Ballroom	The 5th International Workshop on Autonomic Management of high performance Grid and Cloud Computing (AMGCC'17) (Session I)	Keynote: Autonomic Composable Data Center (ACDC): The next generation paradigm for Developing Large Scale Data Centers
Rincon	2nd eCAS Workshop on Engineering Collective Adaptive Systems (eCAS 2017) (Session I, Engineering CAS)	1) "Model-driven Engineering of Decentralized Control in Cyber-Physical Systems," Mirko D'Angelo, Mauro Caporuscio, Annalisa Napolitano 2) "Towards a Foundational API for Resilient Distributed Systems Design," Matteo Francia, Danilo Pianini, Jacob Beal, Mirko Viroli
Copper	1st Workshop on Autonomic Management of Large Scale Container-based Systems (AMLCS) (Session I)	Keynote Speaker: Justin Cappos Topic: "Securing Docker's Supply Chain with TUF"

10:30 AM – 11:00 AM - COFFEE BREAK - Catalina and Tucson Rooms

11:00 AM – 12:30 PM - CONCURRENT BREAKOUT SESSIONS

North Ballroom	Doctoral Symposium (Session II)	<p>Moderator: Gregory Ditzler, The University of Arizona</p> <p>Students: Pratik Satam Sicong Shao Carla Sayan</p> <p>Keynote Speaker: H.J. Siegel , Colorado State University Title: “What I Wish I Had Known about Technical Writing and Giving Presentations”</p>
Santa Rita	Automation of Cloud Configuration and Operations (ACCO) Workshop (Session II)	<p>3) “Autonomic Cross-Layer Management of Cloud Resources Framework,” Cihan Tunc, Farah Fargo, Youssif Al-Nashif and Salim Hariri</p> <p>4) “Autonomic Fault Detection Systems,” Ahmet Turan Özdemir, Cihan Tunc and Salim Hariri</p> <p>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</p>
South Ballroom	The 5th International Workshop on Autonomic Management of high performance Grid and Cloud Computing (AMGCC'17) (Session II)	<p>1) “Analysis of Service-oriented DBMS Organization,” Woong Sul, H.Young Yeom and Hyungsoo Jung</p> <p>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</p> <p>3) “Performance Optimization of Communication Subsystem in Scale-out Distributed Storage,” Uiseok Song, Bodon Jeong, Sungyong Park and Kwonyong Lee</p>
Rincon	2nd eCAS Workshop on Engineering Collective Adaptive Systems (eCAS 2017) (Session II, Management and Optimization of CAS)	<p>3) “Towards a Domain Specific Language for Engineering Collective Adaptive Systems,” Antonio Bucchiarone, Antonio Cicchetti, Martina De Sanctis</p> <p>4) “For Flux Sake: The Confluence of Socially- and Biologically-Inspired Computing for Engineering Change in Open Systems,” Jeremy Pitt, Emma Hart</p> <p>5) “Configuration management for QoS adaptation in multi-vehicle cruise control systems,” Arun Adiththan, Kaliappa Ravindran</p>
Copper	1st Workshop on Autonomic Management of Large Scale Container-based Systems (AMLCS) (Session II)	<p>1) “SWITCHing from multi-tenant to event-driven videoconferencing services,” Jernej Trnkoczy, Uroš Paščinski, Sandi Gec and Vlado Stankovski</p> <p>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</p> <p>3) “Auto-scaling of containers: the impact of relative and absolute metrics,” Emiliano Casalicchio and Vanessa Perciballi</p>

12:30 PM – 2:00 PM – BOX LUNCH - Catalina and Tucson Rooms

2:00 PM – 3:30 PM - CONCURRENT BREAKOUT SESSIONS

<p>North Ballroom</p>	<p>Doctoral Symposium (Session III)</p>	<p>Moderator: Gregory Ditzler, The University of Arizona Students: Jesus Pacheco and Sara Ahmad Makki Edward Richter and Sam Gianelli Nirmal Kumbhare and Arun Adiththan Eduard Renart and Michael John Trotter Ehsan Esmaili and Xiaoyang Zhu Shalaka Satam and Chris Frederickson</p>
<p>Santa Rita</p>	<p>Automation of Cloud Configuration and Operations (ACCO) Workshop (Session III)</p>	<p>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</p>
<p>South Ballroom</p>	<p>The 5th International Workshop on Autonomic Management of high performance Grid and Cloud Computing (AMGCC'17) (Session III)</p>	<p>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, Awais 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</p>
<p>Rincon</p>	<p>2nd eCAS Workshop on Engineering Collective Adaptive Systems (eCAS 2017) (Session III, Management and Optimization of CAS)</p>	<p>6) "RoleDiSCo: A Middleware Architecture and Implementation for Coordinated On-Demand Composition of Smart Service Systems in Decentralized Environments," Markus Wutzler, Thomas Springer, Alexander Schill 7) "Error in Self-Stabilizing Spanning-Tree Estimation of Collective State," Yuanqiu Mo, Jacob Beal, Soura Dasgupta 8) "Parameterisation and Optimisation Patterns for MAPE-K Feedback Loops," Verena Kloes, Thomas Goethel, Sabine Glesner</p>
<p>Copper</p>	<p>1st Workshop on Autonomic Management of Large Scale Container-based Systems (AMLCs) (Session III)</p>	<p>Invited Talk: Alan Sill Topic: "Emulation of Automated Control of Large Data Centers At Scale Using Containers" 4) "FID: A Faster Image Distribution System For Docker Platform," Kangjin Wang, Yong Yang, Ying Li, Hanmei Luo and Lin Ma 5) "Quality of Service models for Micro-services and their integration into the SWITCH IDE," Polona Štefanič, Matej Cigale, Andrew Jones and Vlado Stankovski</p>
<p>Presidio</p>	<p>International Workshop on Autonomic Systems for Big Data Analytics (ASBDA 2017) (Session I)</p>	<p>Invited Talks: 1) "Autonomic Urban Data Science," Naveen Sharma (Rochester Institute of Technology, USA) 2) "On Challenges and Opportunities of Using Automated Workflows for Computational Data Science," Ilkay Altintas (SDSC/UCSD, USA) 3) "Adaptive Sampling and Statistical Inference for Anomaly Detection," Nagarajan Kandasamy (Drexel University, USA)</p>
<p>Agave</p>	<p>3rd International Workshop on Data-driven Self-regulating Systems (DSS 2017) (Session I)</p>	<p>"Introduction," Evangelos Pournaras Keynote: Mark Yao Title: "Orchestration of Electrical Power Grid with Transactive Distributed Energy Resources (DER)" Artifact 1: "Self-regulatory Sharing Economies in Smart Grids and Smart Cities," Evangelos Pournaras Artifact 2: "Self-regulatory Consumption via Self-determined Personalized Ratings," Thomas Asikis</p>

3:30 PM – 4:00 PM - COFFEE BREAK - Catalina and Tucson Rooms

4:00 PM – 5:30 PM - CONCURRENT BREAKOUT SESSIONS

North Ballroom	Doctoral Symposium (Session IV)	Mentoring
South Ballroom	The 5th International Workshop on Autonomic Management of high performance Grid and Cloud Computing (AMGCC'17) (Session IV)	<p>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</p> <p>8) "A Hybrid Cloud Resource Clustering Method using Analysis of Application Characteristics," Yoori Oh and Yoonhee Kim</p>
Rincon	2nd eCAS Workshop on Engineering Collective Adaptive Systems (eCAS 2017) (Session IV)	<p>9) "The Principled Violation of Policy: Norm Flexibilization in Open Self-Organising Systems," David Burth Kurka, Jeremy Pitt</p> <p>Panel Discussion: "Themes and Challenges in Engineering CAS," Chair: Jacob Beal Panel participants: Mirko D'Angelo, Danilo Pianini, Verena Klos, David Burth Kurka</p>
Copper	1st Workshop on Autonomic Management of Large Scale Container-based Systems (AMLCS) (Session IV)	<p>Invited Talk: Abdelwahed, Sherif - Distributed Performance Management for Large-Scale Enterprise Systems: A Model-based Approach</p> <p>Final discussion on future/hot topics/challenges among the participants, organizer and invited speaker</p>
Presidio	International Workshop on Autonomic Systems for Big Data Analytics (ASBDA 2017) (Session II)	<p>1) "Integrating Short History for Improving Clustering Based Network Traffic Anomaly Detection," Philippe Owezarski and Juliette Dromard</p> <p>2) "Tracing Distributed Data Stream Processing Systems," Zoltán Zvara, Péter Szabó, Gábor Hermann and Andras A. Benczur</p> <p>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-Saïd Hacid and Hassan Zeineddine</p>
Agave	3rd International Workshop on Data-driven Self-regulating Systems (DSS 2017) (Session II)	<p>1) "Instance-based Learning for Hybrid Planning," Ashutosh Pandey, Bradley Schmerl, David Garlan</p> <p>2) "Towards Large-scale Material-integrated Computing: Self-Adaptive Materials and Agents," Stefan Bosse, Dirk Lehnhus</p> <p>3) "Predicting Coalition Formation in South China Sea Disputes: An Analysis with an Agent-Based Model," Li Ding</p>

6:00 PM – 8:00 PM – WELCOME RECEPTION - Union Gallery

FAS* 2017



TUESDAY, SEPTEMBER 19, 2017

8:00 AM – 5:00 PM - REGISTRATION - Diamond Atrium

PLEASE CHECK IN TO PICK UP YOUR NAME BADGE AND FOR ON-SITE REGISTRATION

9:00 AM – 9:30 AM	North Ballroom and South Ballroom	Welcome Address by ICCAC and SASO Chairs	
9:30 AM – 10:30 AM	South Ballroom	Plenary Session	Keynote 1 – Prof. Geoffrey West, Santa Fe Institute, USA Topic: “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 AM – 11:00 AM - COFFEE BREAK - Catalina and Tucson Rooms

11:00 AM – 12:30 AM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Session 1: Autonomic Cloud Computing – I (Session Chair: Daniel Menasce)	<ol style="list-style-type: none">1) “A Black-box Approach for Detecting Systems Anomalies in Virtualized Environments,” Olumuyiwa Ibidunmoye, Ewnetu Bayuh Lakew and Erik Elmroth2) “An Autonomic Cloud Application Placement Tool Based on Cost Criteria,” Nabil Abdennadher3) “Towards Designing Cost-Optimal Policies to Utilize IaaS Clouds under Online Learning,” Xiaohu Wu, Patrick Loiseau and Esa Hyytia
North Ballroom	SASO Session 1: Networks (Session Chair: Jake Beal)	<ol style="list-style-type: none">1) “Self-organized Coverage Optimisation in Smart Camera Networks,” Lukas Esterle2) “Self-stabilising target counting in wireless sensor networks using Euler integration,” Danilo Pianini, Mirko Viroli, and Simon Dobson3) “PacketSkip: Skip Graph for Multidimensional Search in Structured Peer-to-Peer Systems,” Andreas Disterhöft, Andreas Funke, and Kalman Graffi

12:30 PM – 2:00 PM – LUNCH BUFFET - Catalina and Tucson Rooms

2:00 PM – 3:30 PM – PLENARY SESSION

<i>South Ballroom</i>	Panel	<p>Moderator: H.J. Siegel, Colorado State University</p> <p>Panel Title: Digital Convergence: What Academic Cloud, Autonomic, Self-Adaptive, and Self-Organizing Research is Useful for Industry in the Short and Long Term?</p> <p>Panelists:</p> <p>Ilkay Altintas, University of California at San Diego</p> <p>Fredricka Darema, US AFOSR (Air Force Office of Scientific Research)</p> <p>Salima Hassas, University of Lyon</p> <p>Heiko Ludwig, IBM Almaden</p> <p>Naveen Sharma, Rochester Institute of Technology</p> <p>Conrad S. Tucker, The Atlantic Council</p>
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3:30 PM – 4:00 PM - COFFEE BREAK - Catalina and Tucson Rooms

4:00 PM – 6:30 PM – Posters, Demos, and Reception - Union Gallery



WEDNESDAY, SEPTEMBER 20, 2017

9:00 AM – 4:00 PM - REGISTRATION - Diamond Atrium

PLEASE CHECK IN TO PICK UP YOUR NAME BADGE AND FOR ON-SITE REGISTRATION

9:30 AM – 10:30 AM	South Ballroom	Plenary Session	Keynote 2 - Dr. Lalit K. Mestha, Principal Engineer, GE Global Research, New York, USA Topic: "Industrial Immune Response to Cyberattacks – Is this even possible?"
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10:30 AM – 11:00 AM - COFFEE BREAK - Catalina and Tucson Rooms

11:00 AM – 12:30 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Session 2: Autonomic Cloud Computing – II (Session Chair: Nabil Abdennadher)	<ol style="list-style-type: none"> 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 Tadakamala and Daniel Menasce
North Ballroom	SASO Session 2: Organizations and Institutions (Session Chair: Jan-Philipp Steghöfer)	<ol style="list-style-type: none"> 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 PM – 2:00 PM – LUNCH BUFFET - Catalina and Tucson Rooms

2:00 PM – 3:30 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Session 3: Self-Protection Techniques of Computing Systems, Networks and Applications (Session Chair: Vladimir Vlassov)	<ol style="list-style-type: none"> 1) "SDR-based Resilient Wireless Communication," Firas Almoualem, Pratik Satam, Jang-Geun Ki and Salim Hariri 2) "Autofotainment 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
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North Ballroom	SASO Session 3: Resource and Network Management (Session Chair: Jean Botev)	1) "Xor-Based Topology Management Beyond Kademia," Erick Lavoie, Miguel Correia, and Laurie Hendren 2) "Resource Adaptation via Test-Based Software Minimization," Arpit Christi, Alex Groce, and Rahul Gopinath 3) "Self-Adaptive Safe Provisioning of Wireless Power using DCOPs," Coen van Leeuwen, Sinan Yildirim, and Przemyslaw Pawelczak
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3:45 PM – 5:15 PM – OPTIONAL EVENT – UNIVERSITY OF ARIZONA MIRROR LAB

An optional tour in The University of Arizona Mirror Lab (<http://mirrorlab.as.arizona.edu/>). The University of Arizona, College of Science is ranked #1 among observational, theoretical and space astronomy programs in the U.S. These new generation giant optical telescopes will be changing the way we explore the Universe!

For the mirror lab tour, we only have 2 sessions available for 15 visitors each. These specially arranged tours begin at 3:45 PM and 4:30 PM and each tour will be 50 minutes. (\$15 USD per person)

4:45 PM - 5:15 PM – BUSES LOADING AT UNIVERSITY OF ARIZONA MIRROR LAB (UA FOOTBALL STADIUM)

5:30 PM – BUSES DEPART UA FOR OLD TUCSON STUDIOS FOR CONFERENCE DINNER

6:30 PM CONFERENCE DINNER – OLD TUCSON STUDIOS

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 1860s Tucson for the movie Arizona, starring William Holden and Jean Arthur. <http://oldtucson.com/>

FAS* 2017



THURSDAY, SEPTEMBER 21, 2017

9:30 AM – 10:30 AM	South Ballroom	Plenary Session	Keynote 3 - Prof. David Garlan, Carnegie Mellon University, USA Topic: "Human-machine synergy: Bringing humans and autonomy into balance"
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10:30 AM – 11:00 AM - COFFEE BREAK - Catalina and Tucson Rooms

11:00 AM – 12:30 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Session 4: Autonomic Computing Systems, Tools and Applications – I (Session Chair: Jesus Pacheco)	<ol style="list-style-type: none"> 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, Jenő Szep and Talal Moukabary 4) "Autonomic Identity Framework for the Internet of Things," Xiaoyang Zhu, Youakim Badr, Jesus Pacheco and Salim Hariri
North Ballroom	SASO Session 4: Fundamentals of Self-Organization (Session Chair: Simon Dobson)	<ol style="list-style-type: none"> 1) "Compositional Blocks for Optimal Self-Healing Gradients," Giorgio Audrito, Roberto Casadei, Ferruccio Damiani, and Mirko Viroli 2) "Multi-level control mechanisms for non-structured and structured 2-dimensional self-assembling," Ciprian Paduraru, Radu Mincu, and Gheorghe Stefanescu 3) "Edge Detection in Static and Dynamic Environments using Robot Swarms," Yara Khaluf

12:30 PM – 2:00 PM – LUNCH BUFFET - Catalina and Tucson Rooms

2:00 PM – 3:30 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Session 5: Autonomic Computing Systems, Tools and Applications – II (Session Chair: Youakim Badr)	<ol style="list-style-type: none"> 4) "Value-Based Scheduling for Oversubscribed Power-Constrained Homogeneous HPC Systems," Nirmal Kumbhare, Cihan Tunc, Dylan Machovec, Ali Akoglu, Salim Hariri and Howard Jay Siegel 5) "Application-Specific Autonomic Cache Tuning for General Purpose GPUs," Sam Gianelli, Edward Richter, Diego Jimenez, Hugo Valdez, Tosiron Adegbiya and Ali Akoglu 6) "Design Framework for Reliable Multiple Autonomic Loops in Smart Environments," Adja Ndeye Sylla, Maxime Louvel, Eric Rutten and Gwenaël Delaval 7) "Cloud-assisted Tree-based P2P System for Low Latency Streaming," Lucas Provensi, Frank Eliassen and Roman Vitenberg
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North Ballroom	SASO Session 5: Fundamentals of Self-Adaptation (Session Chair: Antonio Bucchiarone)	<ol style="list-style-type: none"> 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
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3:30 PM – 4:00 PM - COFFEE BREAK - Catalina and Tucson Rooms

4:00 PM – 5:30 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Session: Dynamic Data Driven Application Systems (Session Chair: Hamamache Kheddouci)	<ol style="list-style-type: none"> 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
North Ballroom	SASO Panel	<p>Panel: Human Roles & Interactions with(in) SASO Systems</p> <p>Panelists:</p> <p>Seth Frey, UC Davis/Dartmouth College</p> <p>Rose Gamble, University of Tulsa</p> <p>Jerzy Rozenblit, University of Arizona</p>

5:30 PM – 6:00 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	ICCAC Closing Session
North Ballroom	SASO Closing Session

FAS* 2017



FRIDAY, SEPTEMBER 22, 2017

9:00 AM – 10:30 AM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	The 1st International Workshop on Autonomics and Cloud Security (ACS) Jointly with Franco-American Workshop on CyberSecurity - Sponsors: Partner University Fund (PUF) and NSF Center for Cloud and Autonomic Computing (Session I)	<p>Welcome Address</p> <ol style="list-style-type: none"> 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
North Ballroom	4th International Workshop on Self-Improving System Integration (SISSY 2017) (Session I)	<ol style="list-style-type: none"> 1) "Learning to Learn: Dynamic Runtime Exploitation of Various Knowledge Sources and Machine Learning Paradigms," Adrian Calma, Daniel Kottke, Bernhard Sick, Sven Tomforde 2) "Integration by Negotiated Behavior Restrictions," Christopher Landauer, Kirstie L. Bellman 3) "Adapting Compliance of Security Requirements in Multi-Tenant Applications," Sarra Alqahtani, Xinchu He, Rose Gamble
Rincon	Fifth International Workshop on Self-Adaptive and Self-Organising Socio-Technical Systems (SASO^ST 2017) (Session I)	<p>Keynote Speaker: Seth Frey, University of California, Davis</p> <p>Title: "The Development of Complex Governance Regimes in Sovereign Online Communities"</p>
Santa Rita	Tutorial (Session I)	Practical Aggregate Programming with Protelis

10:30 AM – 11:00 AM - COFFEE BREAK - Catalina and Tucson Rooms

11:00 AM – 12:30 PM - CONCURRENT BREAKOUT SESSIONS

South Ballroom	The 1st International Workshop on Autonomics and Cloud Security (ACS) Jointly with Franco-American Workshop on CyberSecurity - Sponsors: Partner University Fund (PUF) and NSF Center for Cloud and Autonomic Computing (Session II)	<ol style="list-style-type: none"> 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
North Ballroom	4th International Workshop on Self-Improving System Integration (SISSY 2017) (Session II)	<ol style="list-style-type: none"> 4) "Managing a Posteriori Federations," Craig A. Lee 5) "Cue Integration by Similarity Rank List Coding & Application to Invariant Object Recognition," Raul Grieben, Rolf P. Würtz 6) "System Discovery through Neocortical Architectures and Experimental Play," Jacob Everist

<i>Rincon</i>	Fifth International Workshop on Self-Adaptive and Self-Organising Socio-Technical Systems (SASO[^]ST 2017) (Session II: Socio-Technical Systems Design)	<ol style="list-style-type: none"> 1) "Social and Asocial Learning in Collective Action Problems: The Rise and Fall of Socially-Beneficial Behaviour," Peter R. Lewis, Aniko Ekart 2) "Knowledge Management Processes and Design Principles for Self-Governing Socio-Technical Systems," Jeremy Pitt, Josiah Ober, Ada Diaconescu <p>Invited Talk: Jan-Philip Steghöfer, University of Gothenburg, Chalmers University of Technology Title: "A Change Management Perspective on Interactive Self-Governance"</p>
<i>Santa Rita</i>	Tutorial (Session II)	Practical Aggregate Programming with Protelis

12:30 PM – 2:00 PM – BOX LUNCH - Catalina and Tucson Rooms

2:00 PM – 3:30 PM - CONCURRENT BREAKOUT SESSIONS

<i>South Ballroom</i>	The 1st International Workshop on Autonomics and Cloud Security (ACS) Jointly with Franco-American Workshop on CyberSecurity - Sponsors: Partner University Fund (PUF) and NSF Center for Cloud and Autonomic Computing (Session III)	<ol style="list-style-type: none"> 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
<i>North Ballroom</i>	4th International Workshop on Self-Improving System Integration (SISSY 2017) (Session III)	<ol style="list-style-type: none"> 7) "Ensuring Appropriate Use of Computational Resources in Interwoven Systems," Phyllis R. Nelson 8) "Models and Methods for a High Autonomy, Self-Improving Surgical Training System," Jerzy W Rozenblit 9) "The SISSY Challenge: Expected and Unexpected Integration," Kirstie L. Bellman
<i>Rincon</i>	Fifth International Workshop on Self-Adaptive and Self-Organising Socio-Technical Systems (SASO[^]ST 2017) (Session III: Vehicular and Industrial Applications)	<ol style="list-style-type: none"> 3) "Situation-based Autonomic Management of Automobile Cruise Control Systems," Arun Adiththan, Kaliappa Ravindran, Ramesh S. 4) "Distributive Justice for Fair Auto-adaptive Clusters of Connected Vehicles," Julian Pedro Garbiso, Ada Diaconescu, Marceau Coupechoux, Jeremy Pitt, Bertrand Leroy 5) "Smart-CPR: Self-Organisation and Self-Governance in the Sharing Economy," David Burth Kurka, Jeremy Pitt

3:30 PM – 4:00 PM - COFFEE BREAK - Catalina and Tucson Rooms

4:00 PM – 5:30 PM - CONCURRENT BREAKOUT SESSIONS

<i>North Ballroom</i>	4th International Workshop on Self-Improving System Integration (SISSY 2017) (Session IV)	10) "Self-Integrating and Self-Improving Systems Must Be Socially Sensitive," Peter R. Lewis
<i>Rincon</i>	Fifth International Workshop on Self-Adaptive and Self-Organising Socio-Technical Systems (SASO[^]ST 2017) (Session IV)	<p>Keynote Speaker: Stephen Marsh, University of Ontario Institute of Technology Title: "Let's Be More Tolerant: Differences Are Good Things"</p> <p>Plenary Discussion</p>

END