

**SAM'19  
CONFERENCE SCHEDULE**

The 2019 International Conference on Security and Management (SAM'19)

There are a number of other sessions (not listed as part of SAM'19 Conference) that are of potential interest to SAM'19 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, sessions in EEE (e-Learning, e-Business, Enterprise Information Systems, & e Government), ESCS (Embedded & Cyber-physical Systems), FECS (Education), HIMS (Health Informatics), ICAI (Artificial Intelligence), ICDATA (Data Science), ICOMP (Internet Computing & IoT), ICWN (Wireless Networks), IKE (Knowledge Engineering), PDPTA (Parallel & Distributed Processing), and SERP (Software Engineering) conferences discuss topics that are within the scope of SAM'19; these have been scheduled so that selected SAM'19 attendees can also participate in them.

Each conference is divided into a number of topical sessions. These sessions are not necessarily scheduled in the same room/location. Therefore, conference attendees are to check the location of the tracks they wish to attend; The conference room numbers (Locations) appear in this document.

=====  
July 28 July 28 July 28 July 28 July 28 July 28 July 28 July 28 July 28  
=====

03:00p - 07:00p: REGISTRATION  
(LOCATION: Lotus Ballrooms 1-2; Registration Counter/Desk)

=====  
July 29 July 29 July 29 July 29 July 29 July 29 July 29 July 29 July 29  
=====

07:00a - 05:00p: REGISTRATION  
(LOCATION: Lotus Ballrooms 1-2; Registration Counter/Desk)

08:30 - 09:00am: CONGRESS WELCOME REMARKS - July 29, Monday:  
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator), Department of Computer Science, University of Georgia, USA; Editor-in-Chief, The Journal of Supercomputing (Springer); Fellow, Center of Excellence in Terrorism, Resilience, Intelligence & Organized Crime Research (CENTRIC).  
(LOCATION: Galleria B-C)

- 09:00 - 10:00am: KEYNOTE LECTURE - July 29, Monday:  
INDUSTRIAL ARTIFICIAL INTELLIGENCE - THE DRIVING FORCE OF  
MANUFACTURING  
Prof. Diego Galar  
Professor of Lulea University of Technology, Sweden;  
Head of Maintenance & Reliability, Tecnalia, Spain;  
Coordinator of several H2020 projects in cyber physical  
systems, Industry 4.0, IoT, & industrial Big Data, Europe.  
(LOCATION: Galleria B-C)
- 10:00 - 10:15am: INITIATIVES & PLATFORMS TO ALLEVIATE THE CHALLENGES  
FACED BY RESEARCHERS & PHD STUDENTS IN AFRICA & MOST  
DEVELOPING COUNTRIES  
Nnenna Christine Martin  
ResearchLink International Inc., North Carolina, USA  
(LOCATION: Galleria B-C)
- 10:20 - 10:40am: BREAK
- SESSION 1-SAM: SECURITY MANAGEMENT + SECURITY APPLICATIONS  
Chair: Professor Shengli Yuan, University of Houston-Downtown, USA  
July 29, 2019 (Monday); 10:40am - 12:40pm  
(LOCATION: Galleria A)
- 10:40 - 11:00am: Towards a Method for Examining the Effects of Cognitive Load  
on the Performance of Cyber First Responders  
Craig Speelman, Craig Valli, Oliver Guidetti  
Edith Cowan University, Australia
- 11:00 - 11:20am: Survey of Recent Trends in Anti-Phishing Methodologies and  
Phishing Detection Algorithms  
Beatrice M. Cerda, Shengli Yuan  
University of Houston - Downtown, Texas, USA
- 11:20 - 11:40am: Out-of-Band Authentication Using 2-Factor Image Matching  
Karen Lu, Asad Ali, Benoit Famechon, Najam Siddiqui  
Gemalto Inc., USA
- 11:40 - 12:00pm: Shilling Attacks and their Detection Algorithms in Recommender  
Systems  
Miriam El Khoury Badran, Wissam Jurdi, Jacques Bou Abdo\*  
Notre Dame University, Deir El Qamar, Lebanon
- 12:00 - 12:20pm: Semantic Knowledge Architecture for Cyber Security  
Carla Sayan, Salim Hariri  
The University of Arizona, Tucson, Arizona, USA

12:20 - 12:40pm: Context-Based Blockchain Platform Definition and Analysis  
Methodology: Results from the Application in the BlockIoT  
Project  
Emilio Tissato Nakamura, Sergio Luis Ribeiro\*  
Fundacao CPqD, Campinas, Brazil

12:40 - 01:20pm: LUNCH (On Your Own)

SESSION 2-SAM: KEYNOTE SPEECH:  
CYBER SECURITY - PRIVACY: ARE WE ALL IIVING IN GLASS  
HOUSES? CAN I GET SOME PRIVACY, PLEASE?  
Keynote Speaker: Professor Levent Ertaul, California  
State University, East Bay, California, USA  
July 29, 2019 (Monday); 01:30pm - 03:00pm  
(LOCATION: Galleria A)

03:00 - 03:40pm: POSTER DISCUSSION SESSION A-SAM  
July 29, 2019 (Monday)  
(LOCATION: Lotus Ballrooms 1-2)

- o. A Protocol for Service to Service Authentication using  
Token Challenge Response  
Hiresha Kewalramani, Nader Nassar  
Pace University, New York, USA
- o. ...

03:40 - 04:40pm: During this period, SAM'19 attendees are encouraged to  
participate in sessions belonging to EEE (e-Learning,  
e-Business, Enterprise Information Systems, & e-Government),  
FECS (Education), HIMS (Health Informatics), ICAI  
(Artificial Intelligence), ICOMP (Internet Computing & IoT),  
ICWN (Wireless Networks), IKE (Knowledge Engineering), IPCV  
(Computer Vision), PDPTA (Parallel & Distributed Processing),  
or SERP (Software Engineering) conferences. These sessions  
discuss topics that may be of interest to SAM'19 attendees.

SESSION 3-SAM: SECURITY EDUCATION  
Chairs: Professor Levent Ertaul, California State  
University East Bay, California, USA and  
Dr. Narasimha Rao Vajjhala, American  
University of Nigeria, Nigeria

July 29, 2019 (Monday); 03:40pm - 06:00pm  
(LOCATION: Galleria A)

03:40 - 04:00pm: That's How I Feel: A Study of User's Security Mental Model  
Tahani Albalawi\*, Kambiz Ghazinour, Austin Melton  
Department of Computer Science, Kent State University,  
Kent, Ohio, USA

04:00 - 04:20pm: Protecting the Unmanned Aerial Vehicle from Cyberattacks  
Jesus Nunez, Vincent Tran, Ajay Katangur\*  
California State University Dominguez Hills, California, USA;  
Missouri State University, Missouri, USA

04:20 - 04:40pm: Security Lessons from Building a Back-End Service for Data  
Collection  
Halmon Lui, Chen-Hsiang Yu  
Wentworth Institute of Technology, Boston, Massachusetts, USA

04:40 - 05:00pm: Impact of Cyber Security Mechanisms on Employees' Behavior  
Yasser M. Hausawi  
Institute of Public Administration, Information Technology  
Department, Jeddah Branch, Saudi Arabia

05:00 - 05:20pm: Design and FPGA Implementation of One-Time-Key Cipher  
System DNA Based  
Hanady H. Issa, Amani Salah Elewa, Nabil Hamdy Shaker,  
Khaled A. Hehata  
Arab Academy for Science and Technology, Egypt;  
Maritime Transport; Misr International University, Egypt

05:20 - 05:40pm: FREE SLOT

05:40 - 06:00pm: FREE SLOT

07:30 - 10:30pm: CONFERENCE RECEPTION DINNER / SOCIAL  
July 29 - Monday; 07:30pm  
(LOCATION: Egyptian Ballroom)

=====  
July 30 July 30 July 30 July 30 July 30 July 30 July 30 July 30 July 30  
=====

07:00a - 05:00p: REGISTRATION  
(LOCATION: Lotus Ballrooms 1-2; Registration Counter/Desk)

**SESSION 4-SAM: SECURITY MANAGEMENT + COMPUTER SECURITY**

Chair: Professor Stefan Pickl, University of the  
Federal Armed Forces Munich, Germany  
July 30, 2019 (Tuesday); 08:20am - 10:20am  
(LOCATION: Galleria A)

08:20 - 08:40am: Toward a Quantum Resistant SecretMatch™ Privacy Enhanced  
Technology - A Case Study  
Dwight Horne\*, Suku Nair  
AT&T Center for Virtualization at SMU, Southern Methodist  
University, Dallas, Texas, USA

08:40 - 09:00am: Smart Voting Keys to e-Democracy  
Andrew Wolfe, Arnold J. Sze, Yared Beyene  
University of Washington, Tacoma, Washington, USA

09:00 - 09:20am: VKE: A Visual Analytics Tool for Cyber Security Data  
Antonio Gonzalez-Torres, Vetricia L. Byrd, Paul Parsons  
ULACIT, Costa Rica;  
Purdue University, Indiana, USA

09:20 - 09:40am: Identity Management using Blockchain  
Gokay Saldamli, Sohil Sanjay Mehta, Pranjali Sanjay Raje,  
Madhuri Shiva Kumar, Sumedh Sunil Deshpande  
San Jose State University, California, USA

09:40 - 10:00am: Increasing the Robustness of Deep Learning with Colored  
Noise Augmentation  
Jules Chenou, George Hsieh, Tonya L. Fields  
Computer Science, Norfolk State University, Norfolk,  
Virginia, USA

10:00 - 10:20am: Novel Extended Federated Authentication and Authorization  
Framework  
Edward Rajah, Mathias Fonkam, Narasimha Rao Vajjhala  
American University of Nigeria, Nigeria

10:20 - 10:40am: BREAK

10:40 - 12:20pm: During this period, SAM'19 attendees are encouraged to

participate in sessions belonging to EEE (e-Learning, e-Business, Enterprise Information Systems, & e-Government), FECS (Education), HIMS (Health Informatics), ICAI (Artificial Intelligence), ICOMP (Internet Computing & IoT), ICWN (Wireless Networks), IKE (Knowledge Engineering), IPCV (Computer Vision), PDPTA (Parallel & Distributed Processing), or SERP (Software Engineering) conferences. These sessions discuss topics that may be of interest to SAM'19 attendees.

12:20 - 01:20pm: LUNCH (On Your Own)

SESSION 5-SAM: KEYNOTE SPEECH:  
PRESCRIPTIVE ANALYTICS IN INFRASTRUCTURE SECURITY:  
FROM RESTRAIN TO THE ERA OF QUANTUM ADVANTAGE  
Keynote Speaker: Dr. Maximilian Moll, University of the  
Federal Armed Forces Munich, Germany  
July 30, 2019 (Tuesday); 01:30pm - 03:00pm  
(LOCATION: Galleria A)

03:00 - 03:40pm: POSTER DISCUSSION SESSION B-SAM  
July 30, 2019 (Tuesday)  
(LOCATION: Lotus Ballrooms 1-2)

o. ...

SESSION 6-SAM: INFORMATION ASSURANCE + BIOMETRICS  
Chair: Katia Mayfield, Athens State University, USA  
July 30, 2019 (Tuesday); 03:40am - 06:00pm  
(LOCATION: Galleria A)

03:40 - 04:00pm: Probabilistic Classification for Industrial Cyber Risk  
Using Deep Neural Network  
Xichen Zhang, Arash Habibi Lashkari, Nasim Maleki,  
Joseph F. Mudge, Ali A. Ghorbani  
Canadian Institute for Cybersecurity, University of New Brunswick,  
Canada; The Co-operators General Insurance Company, Canada

04:00 - 04:20pm: Vehicle Routing Optimization for Humanitarian Logistics in  
Disaster Recovery: A Survey  
Wadi Khalid Anuar, Maximilian Moll, Lai Soon Lee, Stefan Pickl,  
Hsin-Vonn Seow  
University Utara Malaysia, Malaysia; University Putra Malaysia,

Malaysia; University of Nottingham Malaysia, Malaysia;  
Universität der Bundeswehr Munchen, Germany

04:20 - 04:40pm: Component Selection Process in Assembling Cyberattack  
Simulation Models  
K. Mayfield\*, M. Petty, T. Whitaker, A. Cantrell, S. Hice,  
J. McClendon, P. Reyes  
Department of Mathematical, Computing, and Natural Sciences,  
Athens State University, Alabama, USA; Department of Computer  
Science, The University of Alabama in Huntsville, Alabama, USA;  
College of Computing and Technology, Lipscomb University,  
Nashville, Tennessee, USA

04:40 - 05:00pm: Feature-level Data Fusion for Biometric Mobile Applications:  
A Case Study  
Sorin Soviany, Cristina Soviany, Sorin Puscoci  
I.N.S.C.C., Romania; Features Analytics, Belgium

05:00 - 05:20pm: Attribute Stream-Based Access Control (ASBAC) - Functional  
Architecture and Patterns  
Dominic Heutelbeck  
Forschungsinstitut für Telekommunikation und Kooperation, Germany

05:20 - 05:40pm: A Survey of Layered Approach to Threats and Countermeasures  
Dina S. Bujud, Ahmed S. AlGhamdi, Malik Najmus Saqib  
Department of Information Technology, Marymount University,  
Arlington, Virginia, USA; College of Computer Science and  
Engineering, University of Jeddah, Saudi Arabia

05:40 - 06:00pm: FREE SLOT

=====  
July 31 July 31 July 31 July 31 July 31 July 31 July 31 July 31 July 31  
=====

07:00a - 05:00p: REGISTRATION  
(LOCATION: Lotus Ballrooms 1-2; Registration Counter/Desk)

SESSION 7-SAM: CRYPTOGRAPHIC TECHNOLOGIES I  
Chair: Dr. Jacques Bou Abdo  
Notre Dame University, Lebanon  
July 31, 2019 (Wednesday); 08:20am - 10:20am

(LOCATION: Galleria A)

08:20 - 08:40am: A Generic Mobile Application for Network Security Testbeds  
Medha Pujari, Jhaghapratha Narayanamoorthy, Weiqing Sun\*,  
Farha Jahan, Bill McCreary, Quamar Niyaz,  
Vijaya K. Devabhaktuni  
University of Toledo, Toledo, Ohio, USA;  
Purdue University Northwest, Indiana, USA

08:40 - 09:00am: An Efficient Private Matching and Set Intersection Protocol:  
Implementation PM-Malicious Server  
G. Saldamli, L. Ertaul, K. Dholakia, U. Sanikommu  
San Jose State University, California, USA;  
California State University, East Bay, California, USA

09:00 - 09:20am: Formalization of Security Requirements and Attack Models  
for Cryptographic Hash Functions in ProVerif  
Togo Yoshimura, Kenichi Arai, Hiroyuki Okazaki, Yuichi Futa  
Shinshu University, Japan; Nagasaki University, Japan;  
Tokyo University of Technology, Japan

09:20 - 09:40am: Chaining JSON Blocks for Secure Transmission of Mobile Data  
Block Sequences  
John Yoon  
Mercy College, New York, USA

09:40 - 10:00am: Blockchain Based IoT Node Authentication in WSNs  
Sunghyuck Hong  
Division of ICT, Baekseok University, Republic of Korea

10:00 - 10:20am: Algorithm for a Time Efficient Calculation of the Statistical  
Distribution of Primes  
Aykan Inan  
University of Applied Sciences Ravensburg-Weingarten, Germany

10:20 - 10:40pm: BREAK

10:40 - 12:20pm: During this period, SAM'19 attendees are encouraged to  
participate in sessions belonging to EEE (e-Learning,  
e-Business, Enterprise Information Systems, & e-Government),  
FECS (Education), HIMS (Health Informatics), ICAI  
(Artificial Intelligence), ICOMP (Internet Computing & IoT),  
ICWN (Wireless Networks), IKE (Knowledge Engineering), IPCV  
(Computer Vision), PDPTA (Parallel & Distributed Processing),  
or SERP (Software Engineering) conferences. These sessions



discuss topics that may be of interest to SAM'19 attendees.

12:20 - 01:20pm: LUNCH (On Your Own)

SESSION 8-SAM: KEYNOTE SPEECH:

IRIS INTELLIGENT REACH BACK INFORMATION SYSTEMS: FROM  
REHSTRAIN to SANCTUM - A NEW SECURITY ARCHITECTURE

Keynote Speaker: Professor Stefan Wolfgang Pickl,  
Board Member, German Committee for Disaster Reduction (DKKV);  
Chair, Operations Research and Director of the Core  
Competence Center for Operations Research (COMTESSA)  
July 31, 2019 (Wednesday); 01:20am - 03:00pm  
(LOCATION: Galleria A)

03:00 - 03:40pm: POSTER DISCUSSION SESSION C-SAM

July 31, 2019 (Wednesday)  
(LOCATION: Lotus Ballrooms 1-2)

o. ...

SESSION 9-SAM: COMPUTER SECURITY + SECURITY APPLICATIONS

Chair: Dr. Krishna Kambhampaty, North Dakota State  
University, North Dakota, USA  
July 31, 2019 (Tuesday); 03:40am - 06:00pm  
(LOCATION: Galleria A)

03:40 - 04:00pm: Android-App-Dissection on the Wandboard - Evolving the  
Platform Into an One-Button-Solution

Heiner Winkler, Christopher Lenk, Philipp Engler,  
Dirk Pawlaszczyk, Christian Hummert  
Computer Engineering / Digital Forensics Group, Hochschule  
Mittweida - University of Applied Sciences, Mittweida,  
Germany; ZITiS - Central Office for Information Technology  
in the Security Sphere, Munich, Germany

04:00 - 04:20pm: Cross-Platform Malware: Study of the Forthcoming Hazard  
Adaptation and Behavior

Bassam Zahran\*, Stacy Nicholson, Aisha Ali-Gombe  
CIS Department, Towson University, Maryland, USA

04:20 - 04:40pm: GPU-Accelerated Randomized Newton Method for Fast Training  
Malicious Web Site Classifier

Yuechao Lu\*, Boqi Gao, Fumihiko Ino

Graduate School of Information Science and Technology,  
Osaka University, Japan

04:40 - 05:00pm: A Novel Approach to Identify Confidential Data in Data  
Leakage Prevention Systems  
Wei-Zi Wu, Bo-Chao Cheng\*  
Department of Communications Engineering,  
National Chung-Cheng University, Taiwan

05:00 - 05:20pm: Fundamental Defensive Programming Practices with Secure  
Coding Modules  
Jeong Yang\*, Akhtar Lodgher  
Computing and Cyber Security, Texas A&M University,  
San Antonio, Texas, USA

05:20 - 05:40pm: Identifying Insider and Masquerade attackers in Cloud  
Computing and IoT Devices  
Krishna Kambhampaty, Kendall E. Nygard\*  
Department of Computer Science,  
North Dakota State University, North Dakota, USA

05:40 - 06:00pm: FREE SLOT

=====  
August 1 August 1 August 1 August 1 August 1 August 1 August 1 August 1  
=====

07:00a - 05:00p: REGISTRATION  
(LOCATION: Lotus Ballrooms 1-2; Registration Counter/Desk)

SESSION 10-SAM: CRYPTOGRAPHIC TECHNOLOGIES I  
Chair: TBD  
August 1, 2019 (Thursday); 08:20am - 10:20am  
(LOCATION: Galleria A)

08:20 - 08:40am: TBA (Late Breaking Papers)

08:40 - 09:00am: TBA (Late Breaking Papers)

09:00 - 09:20am: TBA (Late Breaking Papers)

09:20 - 09:40am: TBA (Late Breaking Papers)

09:40 - 10:00am: TBA (Late Breaking Papers)

10:00 - 10:20am: On the Design Approaches of the S-Box in AES Cryptosystem:  
A Review and Performance Comparison  
Mostafa Abd-El-Barr  
Department of Information Science, College of Computing  
Sciences & Engineering, Kuwait University, Kuwait

10:20 - 10:40am: BREAK

10:40a - 05:00p: During this period, SAM'19 attendees are encouraged to participate in sessions belonging to EEE (e-Learning, e-Business, Enterprise Information Systems, & e-Government), FECS (Education), HIMS (Health Informatics), ICAI (Artificial Intelligence), ICOMP (Internet Computing & IoT), ICWN (Wireless Networks), IKE (Knowledge Engineering), IPCV (Computer Vision), PDPTA (Parallel & Distributed Processing), or SERP (Software Engineering) conferences. These sessions discuss topics that may be of interest to SAM'19 attendees.