

SAM'18 Program

July 29 July 29 July 29 July 29 July 29 July 29 July 29 July 29 July 29

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

July 30 July 30 July 30 July 30 July 30 July 30 July 30 July 30 July 30

07:00am - 05:00pm: REGISTRATION
(Lotus Ballrooms 1-2; Registration Counter/Desk)

08:30 - 08:50am: CONGRESS WELCOME REMARKS - July 30, 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)

08:50 - 09:10am: CONGRESS OPENING SPEECH - July 30, Monday:
Thriving in an Increasingly Interdisciplinary World
Dr. Stacey Franklin Jones
Award winning aerospace software engineer, computer scientist, and higher education administrator as Chair, Dean, Provost, Chancellor, and Vice President (multiple institutions)
(LOCATION: Galleria B-C)

09:10 - 09:30am: AN IMPACTFUL INITIATIVE - July 30, Monday:
Initiatives and Platforms to Alleviate the Challenges Faced by Researchers & PhD Students in Africa & most Developing Countries
Nnenna Christine Martin
Research Director, ResearchLink International LLC, Greensboro, North Carolina, USA
(LOCATION: Galleria B-C)

09:30 - 10:20am: KEYNOTE LECTURE - July 30, Monday:

Data Science in Industry and Transport: The black swan effect and the swan song desire
Prof. Diego Galar
Lulea University of Technology (LTU), Luea, Sweden;
Coordinator of several H2020 projects in cyber physical systems, Industry 4.0, IoT, & industrial Big Data;
Principal searcher, Tecnalia, Spain; Visiting Professor, University of Sunderland (UK); University of Maryland (USA)
(LOCATION: Galleria B-C)

10:20 - 10:40am: BREAK

SESSION 1-SAM: BIOMETRICS, FORENSICS & INFORMATION ASSURANCE I
Chair: Dr. Mikhail Gofman, California State University, Fullerton, USA
July 30, 2018 (Monday); 10:40am - 12:20pm
(LOCATION: Galleria A)

10:40 - 11:00am: Memory Forensics Methodology for Investigating
Cryptocurrency Protocols
Shaimaa S. Ali, Ahmed F. Shosha, Ahmed Elashmawy
Department of Information Security, Nile University, Egypt;
Axenic Limited, New Zealand

11:00 - 11:20am: Minutiae Point Extraction for Fingerprint Verification System
Ifeoma Ugochi Ohaeri, Micheal Bukowo Esiefarienhe
Department of Computer Science, North-West University
Mafikeng Campus, South Africa

11:20 - 11:40am: Multimodal Biometrics via Discriminant Correlation Analysis on Mobile
Devices
Mikhail Gofman, Narciso Sandico, Sinjini Mitra, Eryu Suo, Sadun Muhi, Tyler Vu
California State University, Fullerton, California, USA

11:40 - 12:00pm: Incorporating Delegation into ABAC: Healthcare Information
System Use Case
Khaled Sabahein, Brian Reithel, Feng Wang
University of Mississippi, USA;

12:00 - 12:20pm: FREE SLOT

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

SESSION 2-SAM: GREG VERT MEMORIAL TALK:
Cyber Security - Privacy: Are We All Living in Glass Houses?
Can I Get Some Privacy, Please?

KEYNOTE SPEAKER: Prof. Levent Ertaul, California State University, East Bay, California, USA
July 30, 2018 (Monday); 01:30pm - 03:00pm
(LOCATION: Galleria A)

03:00 - 03:40pm: POSTER DISCUSSION SESSION A-SAM
July 30, 2018 (Monday)
(LOCATION: Lotus Ballrooms 1-2)

- O. A Frequency Analysis of Malicious IP Addresses on a Supercomputing Service Environment
Jae-Kook Lee, Sung-Jun Kim, Jong-Hun Ahn
Supercomputing Service Center, KISTI, Daejeon, Korea;
Cyber Emergency Control Team, KISA, Seoul, Korea
- O. ...

SESSION 3-SAM: BIOMETRICS, FORENSICS & INFORMATION ASSURANCE II
Chair: Prof. Hala Elsadek,
Electronics Research Institute, Egypt
July 30, 2018 (Monday); 03:40pm - 05:00pm
(LOCATION: Galleria A)

03:40 - 04:00pm: The Authentication System Automatically Generating Feature Points: Effect of Dummy Feature Points
Hiroshi Dozono, Tatsuya Chuto, Masanori Nakakuni
Faculty of Science and Engineering, Saga University, Japan;
KYOCERA Document Solutions, Japan;
Fukuoka University, Japan

04:00 - 04:20pm: A Software Assistant for the Development of Secure, Usable and Economically Meaningful Software
Christopher Ruff, Andrea Horch
Competence Team Identity Management, IAT,
University of Stuttgart, Germany;
Competence Team Identity Management,
Fraunhofer IAO, Stuttgart, Germany

04:20 - 04:40pm: Improving the Permission Model to Protect the Smartphone Users' Privacy and Applying it on Android
Nasir Eisty, Abigail Payne, Travis Atkison
CS Department, University of Alabama, Tuscaloosa, USA

04:40 - 05:00pm: Extended Fault-Tolerant Visual Secret Sharing Scheme without Pixel Expansion

Justie Su-Tzu Juan, Yung-Chang Chen
Department of Computer Science and Information Engineering,
National Chi Nan University, Taiwan

05:20 - 07:20pm: INVITED LECTURE (Topic of common interest)
More Data Less Downtime - The road from description,
prediction towards prescription by the means of digitization
Prof. Diego Galar
Lulea University of Technology (LTU), Luea, Sweden;
Coordinator of several H2020 projects in cyber physical
systems, Industry 4.0, IoT, & industrial Big Data;
Principal Researcher, Tecnalía, Spain;
Visiting Professor, University of Sunderland (UK);
University of Maryland (USA); ...
(LOCATION: Galleria B)

08:00 - 10:30pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 30 - Monday; 08:00 - 10:30pm
(LOCATION: TBA)

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

SESSION 4-SAM: SECURITY EDUCATION + BIOMETRICS
Chair: Prof. Guillermo Francia,
Jacksonville State University, USA
July 31, 2018 (Tuesday); 08:20am - 10:40am
(LOCATION: Galleria A)

08:20 - 08:40am: Selection and Promotion Criteria of Information Security
Personnel: Lebanon Case Study
Esther Nehme, Jacques Bou Abdo, Jacques Demerjian
Center for Advanced Technology Development, Lebanon;
CS Department, Notre Dame University, Deir el Qamar,
Lebanon; Faculty of Sciences, Lebanese University, Lebanon

08:40 - 09:00am: Scenario-based Learning Approach to Industrial Control
Systems Security Training

Guillermo A. Francia
Center for Information Security and Assurance,
Jacksonville State University, Jacksonville, Alabama, USA

09:00 - 09:20am: Get a Clue: A New EDURange Scenario for Password Cracking
Rosemary Arends, Raya Deussen, Benjamin Green, Jodi Rush,
and Jens Mache
Lewis & Clark College, Portland, Oregon, USA

09:20 - 09:40am: Social Engineering and its Impacts on Critical
Infrastructure: A Comprehensive Survey
Jason Pollack, Prakash Ranganathan
Department of Electrical Engineering & Mines,
University of North Dakota, North Dakota, USA

09:40 - 10:00am: ADS-B, GPS, IFF, Aviation Navigation Systems Security
Jason Pollack, Prakash Ranganathan
Department of Electrical Engineering & Mines,
University of North Dakota, North Dakota, USA

10:00 - 10:20am: A Comparison of Machine Learning Classifiers for Acoustic
Gait Analysis
Jasper Huang, Fabio Di Troia, Mark Stamp
Department of Computer Science, San Jose State University,
California, USA

10:20 - 10:40am: BREAK

SESSION 5-SAM: SECURITY MANAGEMENT

Chair: Dana Al-Tehmazi,
Bahrain Internet Exchange, Bahrain
July 31, 2018 (Tuesday); 10:40am - 12:20pm
(LOCATION: Galleria A)

10:40 - 11:00am: Investigation of Vulnerabilities with Monitoring Tools
Kazi Zunnurhain, Ankur J. Patel, Mairura James
Kean University, New Jersey, USA

11:00 - 11:20am: Evaluating Security of Software Through Vulnerability
Management Metrics
Jonathan Sonnerup, Martin Hell
Department of Electrical and Information Technology,
Lund University, Lund, Sweden

11:20 - 11:40am: Cyber Security Trust Framework

Dana Isa Al-Tehmazi
Department of Information Communication Technology,
Bahrain Internet Exchange, Manama, Kingdom of Bahrain

11:40 - 12:00pm: A Blockchain System Integrity Model
Mahalingam Ramkumar
Department of CSE, Mississippi State University, USA

12:00 - 12:20pm: Predicting Insider Threats by Behavioral Analysis Using
Deep Learning
Kaushal Bhavsar, Bhushan Trivedi
GLS School of Research & Innovation, Ahmedabad, India;
GLS Institute of Computer Technology, Ahmedabad, India

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

SESSION 6-SAM: KATHY LIZSKA MEMORIAL TALK:
Terrorist Threat: How Resilient are our Train Networks?
KEYNOTE SPEAKER: Dr. Martin Zsifkovits,
University of Armed Forces Munich, Munchen, Germany
July 31, 2018 (Tuesday); 01:30pm - 03:00pm
(LOCATION: Galleria A)

03:00 - 03:40pm: POSTER DISCUSSION SESSION B-SAM
July 31, 2018 (Tuesday)
(LOCATION: Lotus Ballrooms 1-2)

- O. FAIR Vulnerability Determined Using Attack Graphs
Beth Anderson
Computer Science Department, Eastern Washington University,
Spokane, Washington, USA
- O. ...

SESSION 7-SAM: CRYPTOGRAPHIC TECHNIQUES
Chair: Michael B. O'Hara,
KB Computing, LLC, USA
July 31, 2018 (Tuesday); 03:40pm - 05:00pm
(LOCATION: Galleria A)

03:40 - 04:00pm: Analysis of McEliece Cryptosystem on Raspberry Pi 3
G. Saldamli, L. Ertaul, K. M. A. Menon
Computer Engineering Department, San Jose State University,
San Jose, California, USA;

Department of Computer Science,
California State University East Bay, California, USA

04:00 - 04:20pm: There Are No Non-Witnesses
R. D. McLeod, M. R. Friesen
Computer Engineering, University of Manitoba, Canada

04:20 - 04:40pm: An Efficient Solution for Remote User Authentication Using
DNA Crypto and Steganography
Mohammed Misbahuddin
Centre for Development of Advanced Computing (C-DAC),
Bangalore, Karnataka, India

04:40 - 05:00pm: FREE SLOT

05:00 - 05:20pm: FREE SLOT

CONCURRENT KEYNOTE TALKS OF GENERAL INTEREST

04:40 - 05:40pm: KEYNOTE/INVITED LECTURE:
What I Wish I Had Known about Giving Technical Presentations
and Doing Technical Writing
Prof. H. J. Siegel
Fellow of the IEEE; Fellow of the ACM; Department of ECE &
Department of CS; Colorado State University, Fort Collins,
Colorado, USA
(LOCATION: Galleria C)

05:40 - 06:30pm: KEYNOTE/INVITED LECTURE:
Applications of AI: A Pragmatic Perspective
Prof. Andrew Ware
Professor of Computing, University of South Wales, UK;
Regional Director of Techno Camps, UK
(LOCATION: Galleria C)

05:40 - 07:40pm: INVITED TUTORIAL & TALK:
Machine Learning and Urban Analytics
Dr. Richard Dunks
Founder of Datapolitan, New York, USA
(LOCATION: Galleria B) <----- note the change in location

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

SESSION 8-SAM: COMPUTER SECURITY

Chair: Dr. Jens Kohler,
University of Applied Sciences, Germany
August 1, 2018 (Wednesday); 08:00am - 10:20am
(LOCATION: Galleria A)

08:20 - 08:40am: Petri Nets with Players, Strategies, and Cost: A Formalism
for Modeling Cyberattacks
Katia P. Mayfield, Mikel D. Petty
Department of Mathematics, Computer and Natural Sciences,
Athens State University, Alabama, USA;
Department of CS,
University of Alabama in Huntsville, Alabama, USA

08:40 - 09:00am: A Comprehensive Model for Elucidating Advanced Persistent
Threats (APT)
Rudra Prasad Baksi, Shambhu J. Upadhyaya
Department of CSE, University at Buffalo, SUNY, Buffalo,
New York, USA

09:00 - 09:20am: Applying the Kill Chain and Diamond Models to Microsoft
Advanced Threat Analytics (MS ATA)
Levent Ertaul, Mina Mousa
CS Department, California State University East Bay,
California, USA

09:20 - 09:40am: Automating Deployment of Gh0st Remote Access Trojan Malware
Brandon Johnson, George Hsieh, Mary Ann Hoppa
Computer Science, Norfolk State University, Virginia, USA

09:40 - 10:00am: Computer Attacks as Machines of Things that Flow
Sabah Al-Fedaghi, Mennat Allah Bayoumi
CE Department, Kuwait University, Kuwait;
Professional Services Department, EBLA Computer Consultancy, Kuwait

10:00 - 10:20am: An Immunity-based Security Threat Detection Model for
Digital Virtual Assets
Ping Lin, Tao Li, Xiaojie Liu, Hui Zhao, Xiaojun Zhou, and Fangdong Zhu
College of CS, Sichuan University, Chengdu, P. R. China;
College of Cybersecurity, Sichuan University, Chengdu, China

10:20 - 10:40pm: BREAK

10:40a - 12:20p: During this period, SAM'18 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'18 attendees.

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

SESSION 9-SAM: NETWORK AND HARDWARE SECURITY

Chair: Prof. Levent Ertaul,
California State University East Bay,
California, USA
August 1, 2018 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Galleria A)

01:20 - 01:40pm: Detecting Vulnerabilities within Black Boxed CPUs using
Assertion Based Verification for Enhanced Security
Juan Portillo, Eugene John
Department of Electrical and Computer Engineering,
University of Texas at San Antonio, Texas, USA

01:40 - 02:00pm: Network Security Risk Assessment Based on Weighted
PageRank
Lei Ai, Tao Li, Xiaojie Liu, Hui Zhao, Jin Yang
College of CS, Sichuan University, Chengdu, P. R. China;
College of Cybersecurity, Sichuan University, Chengdu, P. R. China

02:00 - 02:20pm: FREE SLOT

02:20 - 02:40pm: FREE SLOT

02:40 - 03:00pm: FREE SLOT

03:00 - 03:40pm: POSTER DISCUSSION SESSION C-SAM
August 1, 2018 (Wednesday)
(LOCATION: Lotus Ballrooms 1-2)

- O. User-Centric Cryptography - Shifting Power from the Cipher Designer to the Cipher User
Gideon Samid
Department of Electrical Engineering and Computer Science,
Case Western Reserve University, USA
- O. ...

SESSION 10-SAM: SECURITY APPLICATIONS

Co-Chairs: Dr. Hiroshi Dozono, Saga University, Japan;
Dr. Jacques Bou Abdo, Notre Dame University, Louaize, Lebanon
August 1, 2018 (Wednesday); 03:40pm - 06:00pm
(LOCATION: Galleria A)

- 03:40 - 04:00pm: Electromagnetic Antenna Sensors for Security Systems' Applications
Tamer Abouelnaga, Haythem Hussein, Hala Elsadek, and
Hesham Eldeeb
Electronics Research Institute, ElNozha Elgadida, Egypt
- 04:00 - 04:20pm: Semi-Fragile Watermarking Scheme for CFA Images Based on Authentication Table
Chia-Chen Lin, Xiao-Long Liu, Cheng-Han Lin
Department of Computer Science and Information Management,
Providence University, Taiwan;
Department of Computer Science, National Chiao Tung University, P. R. China
- 04:20 - 04:40pm: VW16F: A Robust Video Watermarking Using Simulated Block Based Spatial Domain Technique
Farnaz Arab, Mazdak Zamani
Felician University, Lodi, New Jersey, USA
- 04:40 - 05:00pm: Developing a UI and Automation Framework for a Cybersecurity Research and Experimentation Environment
Cody Butler, George Thompson, George Hsieh, Mary Ann Hoppa,
and Kevin S. Nauer
CS, Norfolk State University Norfolk, Virginia, USA;
Computer & Network Security, Sandia National Laboratories,
Albuquerque, New Mexico, USA
- 05:00 - 05:20pm: Performance Evaluation of a Diagonal n-Partitioning Approach for Security-Aware Data Management in the Cloud
Dennis Kern, Jens Kohler, Oliver Hummel, Thomas Specht
Institute for Enterprise Computing, University of Applied

Sciences, Mannheim, Paul-Wittsack-Str., Mannheim, Germany

05:20 - 05:40pm: TwitterOSINT: Automated Cybersecurity Threat Intelligence Collection and Analysis using Twitter Data
Satyanarayan Raju Vadapalli, George Hsieh, Kevin S. Nauer
CS, Norfolk State University, Norfolk, Virginia, USA;
Computer & Network Security, Sandia National Labs,
Albuquerque, New Mexico, USA

05:40 - 06:00pm: Protecting Sensitive Data in Android SQLite Databases using TrustZone
Francis Akowuah, Amit Ahlawat, Wenliang Du
Electrical Engineering and Computer Science,
Syracuse University, Syracuse, New York, USA

CONCURRENT KEYNOTE TALK OF GENERAL INTEREST

05:40 - 07:40pm: INVITED TUTORIAL & LECTURE:
Darknets and Cryptocurrency
Andrew Johnston
Mandiant (Consultant), a division of FireEye
(LOCATION: Galleria B)

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07:00a - 05:00p: REGISTRATION
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08:00a - 06:00p: During this period, SAM'18 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'18 attendees.