SAM'17, ICWN'17 Schedules - Monday, July 17

07:00a - 05:00p: REGISTRATION (2nd Floor, East Ballrooms 6-8; Registration Counter/Desk)

08:30 - 08:50am: CONGRESS OPENING REMARKS - July 17, 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: East Ballrooms 6 & 7)

08:50 - 09:00am: Announcement:

ALLEVIATING THE CHALLENGES FACED BY AFRICAN RESEARCHERS

& PHD STUDENTS THROUGH COLLABORATION & BUILDING NETWORKS

Nnenna Christine Martin Research Director, ResearchLink International, Greensboro, North Carolina, USA (LOCATION: East Ballrooms 6 & 7)

09:05 - 10:00am: KEYNOTE LECTURE - July 17, Monday: ROBUST COMPUTING SYSTEMS

Prof. H. J. Siegel

IEEE Fellow; ACM Fellow; Founding Director of Information Science and Technology Center; Abell Endowed Chair Distinguished Professor of Electrical and Computer Engineering and Professor of Computer Science; Department ECE and CS, Colorado State University, Fort Collins, USA (LOCATION: East Ballrooms 6 & 7)

10:05 - 10:50am: KEYNOTE LECTURE - July 17, Monday: VIRTUAL ASSETS & VIRTUAL COMMISSIONING: DIGITIZATION IN

TRANSPORT AND INDUSTRY

Prof. Diego Galar

Professor & Former Director of Academic Innovation and Subsequently Pro-Vice-Chancellor; Division of O&M Engineering,

Lulea University of Technology, Sweden; Head, Maintenance and Reliability at TECNALIA, Spain; VOLVO Chair for Reliability and Maintenance, Skovde University, Sweden (LOCATION: East Ballrooms 6 & 7)

SESSION 1-ICWN: WIRELESS NETWORKS, MOBILITY, SENSOR NETWORKS, AND

APPLICATIONS + SECURITY ISSUES

Chairs: TBA

July 17, 2017 (Monday); 11:00am - 12:00pm

(LOCATION: Ballroom 6)

11:00 - 11:20am: Design and Implementation of SDN-Based Packet Transport

Networks

Wen-Chun Hsu, Ping-Fan Ho, Jyh-Cheng Chen Loop Telecommunication International, Inc., Hsinchu, Taiwan; Department of Computer Science, National Chiao Tung University, Hsinchu, Taiwan

- 11:20 11:40am: Security of Software Defined Networks (SDN)
 Krishnakumar Venkatachalam, Levent Ertaul
 Department of Computer Science, California State University,
 East Bay, California, USA
- 11:40 12:00pm: A Device for Integrated Traffic Violation Apprehension and

Payment System using NFC Technology Luisito L. Lacatan, Patrick M. Tolentino, Paul S. Gilber, Seth B. Guerrero, Ken L. Pascual Computer Engineering Department, College of Engineering, Adamson University, Manila, Philippines

12:00 - 01:00pm: LUNCH (On Your Own)

SESSION 1-SAM: NETWORK SECURITY + SECURITY MANAGEMENT Chair: Dr. Greg Vert,
Embry Riddle Aeronautical University, USA

July 17, 2017 (Monday); 01:00pm - 03:00pm

(LOCATION: Ballroom 6)

01:00 - 01:20pm: A Visual Approach to Data Fusion in Sensor Networks

Martin Zsifkovits, Maximilian Moll, Truong Son Pham, Stefan Wolfgang Pickl Universitaet der Bundeswehr Muenchen, Germany

01:20 - 01:40pm: Protection from Black Hole Attacks in Communication Networks

Beatrice Cerda, Ester Martinez-Belmares, Shengli Yuan Department of Computer Science and Engineering Technology, University of Houston-Downtown, Houston, Texas, USA

01:40 - 02:00pm: A Survey on Wireless Security Protocol WPA2 Samia Alblwi, Khalil Shujaee, Roy George Department of Computer and Information Science, Clark Atlanta University, Atlanta, Georgia, USA

02:00 - 02:20pm: MAC Address Based Sensor Network Authentication: Survey

Sunghyuck Hong, Kyungil Ko Baekseok University, Cheonan, Republic of Korea

02:20 - 02:40pm: NOAH for IoT: Cybersecurity Strategy for Home Applications

Erica Mitchell, Joon Park Syracuse University, USA

02:40 - 03:00pm: Evaluation of Highly Efficient Scalar Multiplication in Elliptic Curve Cryptography
Nozomi Miyamoto, Hikari Yoshii, Daisuke Miyake,
Mayuko Hirose, Itaru Koike, Toshiyuki Kinoshita
School of Computer Science, Tokyo University of Technology,
Hachioji Tokyo, Japan

03:00 - 03:40pm: POSTER SESSION A

(INCLUDES POSTER + SHORT & POSITION PAPERS)

July 17, 2017 (Monday)

(LOCATION: Hallways of Ballrooms 6, 7, & 8)

O. Lattice-Reduction Aided Adaptive Detection Scheme Depending on Channel Condition Seung-Jin Choi, Jong-Kwang Kim, Jae-Hyun Ro, Hyoung-Kyu Song uT Communication Research Institute, Sejong-University, Seoul, Republic of Korea O. Wireless Electricity Charging Protocol with Solar Cell and Magnetic Resonant Coupling Technologies Hwajung Lee Department of Information Technology, Radford University, Radford, Virginia, USA

O. Coordinated Multi Point with Spatial Phase Coding for Interference Mitigation in the Wireless Communication Won-Chang Kim, Sang-Young Kim, Hyoung-Kyu Song uT Communication Research Institute, Sejong-University, Seoul, Republic of Korea

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SESSION 2-SAM: CRYPTOGRAPHIC TECHNOLOGIES

Chair: Dr. Erica Mitchell

Syracuse University, USA

July 17, 2017 (Monday); 03:40pm - 05:00pm

(LOCATION: Ballroom 6)

03:40 - 04:00pm: IoT Security: Performance Evaluation of Grain, MICKEY, and Trivium - Lightweight Stream Ciphers
Levent Ertaul, Arnold Woodall
Department of Computer Science, California State University
Eastbay, California, USA

04:00 - 04:20pm: Performance Analysis of CLEFIA, PICCOLO, TWINE Lightweight

Block Ciphers in IoT Environment Levent Ertaul, Sachin Kattepura Rajegowda Department of Computer Science, California State University Eastbay, California, USA

04:20 - 04:40pm: A New Key Management and Authentication Architecture for

ZigBee Networks (KAAZ) Ouassila Hoceini, Hossam Afifi, and Rachida Aoudjit Mouloud Mammeri University of Tizi Ouzou, Algeria; Mines Telecom, France

04:40 - 05:00pm: Threshold Secret Sharing Based on 3D-Cellular Automata Rosemary Koikara, Pyung-Han Kim, Eun-Jun Yoon, Anand Paul, and Kee-Young Yoo School of Computer Science and Engineering, Kyungpook National University, South Korea;

Department of Cyber Security, Kyungil University, South Korea

SESSION 3-SAM: BIOMETRICS + HARDWARE SECURITY

Chair: Dr. Hiroshi Dozono Saga University, Japan

July 17, 2017 (Monday); 05:00pm - 06:00pm

(LOCATION: Ballroom 6)

05:00 - 05:20pm: A Study on Korea's Information Security Management System:

An Insider Threat Perspective

Ran Kyoung Park, Jong In Lim, Kwon, Hun Yeong, Jin-Young

Choi

Korea University, Korea

05:20 - 05:40pm: Cloud Solution for Management and Security in Temporary

Reception Centres

G. L. Masala, R. Pola, M. L. Ganadu

School of Computing, Electronics and Mathematics,

Plymouth University, UK; Department of Humanities and Social

Sciences, University of Sassari, Sassari, Italy

05:40 - 06:00pm: A High-order Masking Approach for Hardware Implementation of

CLEFIA Cipher on FPGA

Abdullah Baihan, Parasara Sridhar Duggirala, Mohammed

Baihan

Computer Science and Engineering Department, University of

Connecticut, USA;

Computer Science Department, Community College, King Saud

University, Saudi Arabia

XX:XX - 07:00pm: Keynotes, Invited Lectures, Tutorials, Discussions (Please refer to the lists at the beginning of the program book for details)

08:30 - 11:00pm: CONFERENCE RECEPTION DINNER / SOCIAL

July 17 - Monday; 08:30pm - 11:30pm

(LOCATION: Ballrooms 6 & 7)

SAM'17, ICWN'17 Schedules - Tuesday, July 18

07:00a - 05:00p: REGISTRATION (2nd Floor, East Ballrooms 6-8; Registration Counter/Desk)

SESSION 4-SAM: SECURITY EDUCATION

Chair: Dr. Martin Zsifkovits

Universitaet der Bundeswehr Muenchen, Germany

July 18, 2017 (Tuesday); 08:20am - 10:20am

(LOCATION: Ballroom 6)

08:20 - 08:40am: Analyzing and Improving the NCL Ethical Hacking Lab Exercises

George Shoemaker, Ahmed Gedi, Balal Rahim, Nick Tan, Jens Mache, Richard Weiss Lewis & Clark College, Portland, Oregon, USA; The Evergreen State College, Olympia, Washington, USA

08:40 - 09:00am: Building a Gh0st Malware Experimentation Environment Vamshika Boinapally, George Hsieh, Kevin S. Nauer Norfolk State University, Norfolk, Virginia, USA; Sandia National Laboratories, Albuquerque, New Mexico, USA

09:00 - 09:20am: Building a Virtual Enterprise Network Environment for APT

Experimentation

Kaila M. Perry, George Hsieh, Cody Butler, Sean Michael Yurko Galvin, Kevin S. Nauer Norfolk State University, Norfolk, Virginia, USA; Sandia National Laboratories, Albuquerque, New Mexico, USA

09:20 - 09:40am: Applying Security in Moodle Grades
Sofia Oraa Perez, Carmen Hernandez Diez,
and Jose Antonio Marcos Garcia
Isabel I University, Spain; University of Valladolid, Spain

09:40 - 10:00am: Undergraduate Software Engineering Experience - Developing

an Authentication System
Suhair Amer, Wenxing Qiu
Department of Computer Science, Southeast Missouri State
University, Cape Girardeau, Missouri, USA

10:00 - 10:20am: Steganography - Capstone Experience Project
Suhair Amer
Department of Computer Science, Southeast Missouri State
University, Cape Girardeau, Missouri, USA

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10:20 - 10:40am: BREAK

SESSION 5-SAM: Computer SECURITY I

Chair: Prof. Levent Ertaul

California State University East Bay, USA July 18, 2017 (Tuesday); 10:40am - 12:20pm

(LOCATION: Ballroom 6)

10:40 - 11:00am: A Light-weight Method to Send and Receive SMS Messages

in an Emulator

Chi-Yu You, Yan-Ling Hwang, Chuan-Kai Kao, Fu-Hau Hsu, and Chia-Hao Lee

Department of Computer Science and Information Engineering, National Central University, Taoyuan City, Taiwan, ROC; School of Applied Foreign Languages, Chung Shan Medical University, Taichung City, Taiwan, ROC; CyberTrust Technology Institute, Institute for Information Industry, Taipei City, Taiwan, ROC

11:00 - 11:20am: Android-App-Dissection on the Wandboard - Automatic Analysis

of Malicious Mobile Code Heiner Winkler, Christian Hummert Hochschule Mittweida - University of Applied Sciences, Forensic Science Investigation Lab, Mittweida, Germany

11:20 - 11:40am: Model for Autonomous Correlation of Intrusion Detection State

Variables over Spatial, Temporal, and Ontological Domains Erica Bott, Jesse Roberts, Gregory Vert College of Security and Intelligence, Embry-Riddle Aeronautical University, USA

11:40 - 12:00pm: Examining Features for Android Malware Detection Matthew Leeds, Miclain Keffeler, Travis Atkison Computer Science Department, University of Alabama,

Tuscaloosa, Alabama, USA

12:00 - 12:20pm: An Evolutionary Approach of Attack Graphs and Attack

Trees: A Survey of Attack Modeling

Md. Shariful Haque, Miclain Keffeler, Travis Atkison Department of Computer Science, University of Alabama, Tuscaloosa, Alabama, USA

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

SESSION 2-ICWN: COMMUNICATION SYSTEMS, WIRELESS NETWORKS AND

NOVEL APPLICATIONS

Chairs: TBA

July 18, 2017 (Tuesday); 01:20pm - 03:00pm

(LOCATION: Ballroom 6)

01:20 - 01:40pm: A Hybrid Passive and Active Location Aware Framework for

Tracking Movement Indoors

Kevin Curran

School of Computing and Intelligent Systems, Ulster University, Londonderry, Northern Ireland

01:40 - 02:00pm: Relationship-based Intercom Platform for Smart Space
Daecheon Kim, Duc-Tai Le, Hyunseung Choo
School of Information and Communication Engineering,
Sungkyunkwan University, Suwon, South Korea

02:00 - 02:20pm: IoT Radio in 250 Mhz

Carlos Henrique Rodrigues De Oliveira, Rodolfo De Sousa Costa, Giselle Braga Carvalho, Felipe Santana Oliveira Computer Engineering - Technological Sciences Center (CCT), State University of Maranhao (UEMA), Sao Luis, Brazil; Telecommunications Research and Development Center (CPqD), Campinas, Brazil

02:20 - 02:40pm: A Message Sharing Method for Clustered Environment in VANET

Jaejeong Lee, Byoungchul Ahn Department of Computer Engineering, Yeungnam University, South Korea 02:40 - 03:00pm: Improvement of Route Detection Ratio by Node Mobility in

Wireless Multihop Networks Hiroaki Higaki Department of Robotics and Mechatronics, Tokyo Denki University, Japan

03:00 - 03:40pm: POSTER SESSION B
(INCLUDES POSTER + SHORT & POSITION PAPERS)
July 18, 2017 (Tuesday)
(LOCATION: Hallways of Ballrooms 6, 7, & 8)

- O. Dynamic Scalable ECC Scheme and its Application to Encryption Workflow Design
 Jia Wang, Lee-Ming Cheng
 City University of Hong Kong, Hong Kong
- O. An Analysis of Intrusion Prevention Data Against HPC
 Services in KISTI
 Jae-Kook Lee, Sung-Jun Kim, Taeyoung Hong
 Division of Supercomputer Infrastructure, KISTI, Daejeon,
 South Korea
- O. A Chaining User Authentication with Distributed Clustering in the IoT Environment Dong-Hoon Kim, Ki Young Lee Department of Information & Telecommunication

Engineering,

Incheon National University, Incheon, South Korea O. \dots

SESSION 6-SAM: INFORMATION ASSURANCE

Chair: Dr. Mario A. Garcia Texas A&M University - Corpus Christi, Texas, USA July 18, 2017 (Tuesday); 03:40pm - 06:00pm (LOCATION: Ballroom 6)

03:40 - 04:00pm: The Significance of Information Security Risk Assessments:

Exploring the Consensus of Raters' Perceptions of Probability and Severity Jonas Hallberg, Johan Bengtsson, Niklas Hallberg, Henrik Karlzen, Teodor Sommestad Swedish Defence Research Agency, Linkoping, Sweden

- 04:00 04:20pm: Backup Monitoring in Large Heterogenous Business Cloud Computing Environments: A Framework for the Development of a Reliable Automated Process
 Krassie Petrova, Anne Abbott
 Auckland University of Technology, Auckland, New Zealand
- 04:20 04:40pm: Efficient Isolation Enabled Role-Based Access Control for Database Systems

 Mohammad Rahat Helal, Weiqing Sun, Ahmad Y. Javaid
 University of Toledo, Toledo, USA
- 04:40 05:00pm: Minimal TCB for System-Model Execution
 Mahalingam Ramkumar
 Department of Computer Science and Engineering,
 Mississippi State University, Mississippi, USA
- XX:XX 07:00pm: Keynotes, Invited Lectures, Tutorials, Discussions (Please refer to the lists at the beginning of the program book for details)

SAM'17, ICWN'17 Schedules - Wednesday, July 19

07:00a - 05:00p: REGISTRATION (2nd Floor, East Ballrooms 6-8; Registration Counter/Desk)

SESSION 7-SAM: SECURITY APPLICATIONS
Chair: Prof. Levent Ertaul

(LOCATION: Ballroom 6)

California State University East Bay, USA

July 19, 2017 (Wednesday); 08:20am - 10:20am (LOCATION: Ballroom 6)

08:20 - 08:40am: Using Pattern Filtering to Detect and Prevent Persistent Cross-Site Scripting (XSS) Attacks
Samrat Bongiri, Mario A. Garcia
Texas A&M University-Corpus Christi, Texas, USA

08:40 - 09:00am: Applications of Fair and Privacy-Enhanced Matchmaking with

Identity Linked Wishes
Dwight Horne, Suku Nair
Department of Computer Science and Engineering,
Southern Methodist University, USA

09:00 - 09:20am: A Framework for Web Applications Security and Response System

Naveen Chada, Dulal Kar, Ajay Katangur Department of Computing Sciences, Texas A&M University-Corpus Christi, Texas, USA

09:20 - 09:40am: Improved Reversible Data Hiding using Mean Values in an

Encrypted Image

Kyung-Yoon Seo, Dae-Soo Kim, Eun-Jun Yoon, Kee-Young Yoo School of Computer Science and Engineering, Kyungpook National University, South Korea; Department of Cyber Security, Kyungil University, South Korea

09:40 - 10:00am: Virtual Keyboard Logging Counter-measures using Common

Fate's Law

Nicolas Echallier, Gilles Grimaud, Julien Iguchi-Cartigny, Jean-Marie Place, Jean-Phillipe Wary Universite de Lille, France; Orange Labs, France

10:00 - 10:20am: FREE SLOT

10:20 - 10:40pm: BREAK

10:40a - 12:20p: During this period, SAM'17 and ICWN'17 attendees are encouraged

to participate in sessions belonging to ABDA (Advances in Big Data Analytics), DMIN (Data Mining), EEE (e-Learning, e-Business, EIS, e-Government), ESCS (Cyber-physical

Systems),

FECS (Education), HIMS (Health Informatics), ICAI (Artificial Intelligence), ICOMP (IoT), or PDPTA (Parallel and Distributed Processing). These sessions discuss topics that may be of interest to SAM'17 and ICWN'17 attendees.

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

SESSION 8-SAM: COMPUTER SECURITY II

Chair: Dr. Ken Ferens

University of Manitoba, Canada

July 19, 2017 (Wednesday); 01:20am - 03:00pm

(LOCATION: Ballroom 6)

01:20 - 01:40pm: Probabilistic Deception and Attacker Experimentation Sharif Hassan, Ratan Guha University of Central Florida, Orlando, Florida, USA

01:40 - 02:00pm: Using IDS to Prevent XSS Attacks Charlie Obimbo, Kashan Ali, Khalid Mohamed School of Computer Science, University of Guelph, Guelph, Ontario, Canada

02:00 - 02:20pm: Comparison of SVMs with Radial-Basis function and Polynomial

Kernels in Classification of Categories in Intrusion

Detection

Seoul, Korea

Charlie Obimbo, Eric Nyakundi

School of Computer Science, University of Guelph, Guelph, Ontario, Canada

02:20 - 02:40pm: Formal Specification and Verification of Firewall using TLA+

Young-Mi Kim, Miyoung Kang, Jing-Young Choi Department of Computer & Radio Communication Engineering, Korea University, Seoul, Korea; ITRC Center, Korea University, Seoul, Korea; Graduate School of Information Security, Korea University, 02:40 - 03:00pm: FREE SLOT

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

(INCLUDES POSTER + SHORT & POSITION PAPERS)

July 19, 2017 (Wednesday)

(LOCATION: Hallways of Ballrooms 6, 7, & 8)

O. Cost Integrated Schemes for Decoy Deployment in Virtualized Cloud Services Protection Tulha Al-Salah, Liang Hong College of Engineering, Tennessee State University, Nashville, Tennessee, USA

O. Vulnerability Analysis and Attacks on Intel Xeon Phi Coprocessor Seungmin Lee, Ju-Won Park

Division of Supercomputing, Korea Institute of Science & Technology Information (KISTI), Daejeon, Republic of Korea

O. The Proximity Communication Frameworks for Target Recognition Before Participating in a WLAN Jaebok Park, Sungho Im, Seungmok Yoo, Kyunghee Lee, Seokjin Yun, Changsik Cho Electronics and Telecommunications Research Institute (ETRI), Daejeon, Chungnam, South Korea

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SESSION 3-ICWN: WIRELESS NETWORKS, MOBILITY, SENSOR NETWORKS, AND

APPLICATIONS + SECURITY ISSUES

Chairs: TBA

July 19, 2017 (Wednesday); 03:40pm - 06:00pm

(LOCATION: Ballroom 6)

03:40 - 04:00pm: Intelligent Mobile Agent Application for Spectrum and Network

Management in Cognitive Radio Networks Nnenna Christine Martin College of Computing & Informatics, University of North Carolina, Charlotte, North Carolina, USA

04:00 - 04:20pm: Application Level Encryption in Bluetooth
Ajay K. Katangur, Somasheker Akkaladevi, Dulal Kar

Department of Computing Sciences, Texas A&M University - Corpus Christi, Texas, USA;

Department of Computer Information Systems, Virginia State University, Petersburg, Virginia, USA

04:20 - 04:40pm: An Efficient Approach for Evaluating Performance in LTE Wireless Networks

Yunus Egi, Engin Eyceyurt, Ivica Kostanic, Carlos E. Otero Florida Institute of Technology, Florida, USA

04:40 - 05:00pm: Design of Livestock Farm Integrated Control System Hyun Yoe, Hyungi Kim

Department of Information and Communication Engineering, Sunchon National University, Korea

05:00 - 05:20pm: Monitoring and Fault Detection System for Power Transmission

using GSM Technology

Okokpujie Kennedy, Amuta Elizabeth, Okonigene Robert, and Samuel John

Department of Electrical and Information Engineering, Covenant University, Ota, Nigeria;

Department of Electrical and Electronics Engineering, Ambrose Alli University, Ekopma, Nigeria

05:20 - 05:40pm: Performance Evaluation of a Base Station Sleeping Scheme

Meant for Next Generation Mobile Networks Weston Mwashita, Marcel O. Odhiambo

Department of Electrical & Mining Engineering, University of South Africa, UNISA, South Africa;

Department of Process Control & Computer Systems,

Vaal University of Technology, Vanderbijlpark, South Africa

05:40 - 06:00pm: An Energy Efficient Geographic Routing Scheme Based on

Location Prediction

Zhenchao Wang, Huanhuan Hou, Rui Lian

College of Electronic and Information Engineering,

Hebei University, China;

Key Laboratory of Digital Medical Engineering,

Hebei Province, China

XX:XX - 07:00pm: Keynotes, Invited Lectures, Tutorials, Discussions

(Please refer to the lists at the beginning of the program book for details)

SAM'17, ICWN'17 Schedules - Thursday, July 20

07:00a - 05:00p: REGISTRATION (2nd Floor, East Ballrooms 6-8; Registration Counter/Desk)

08:40a - 05:00p: During this period, SAM'17 and ICWN'17 attendees are encouraged

to participate in sessions belonging to BIOCOMP (Computational Biology), CSC (Scientific Computing), EEE (e-Learning, e-Business, EIS, e-Government), FECS (Education), HIMS

(Health

Informatics), ICAI (Artificial Intelligence), ICOMP (IoT), IPCV (Image Processing, Computer Vision, & Pattern

Recognition),

MSV (Modeling, Simulation and Visualization Methods), PDPTA (Parallel and Distributed Processing), and/or SERP (Software Engineering Research). These sessions discuss topics that may be of interest to SAM'17 and ICWN'17 attendees.

05:00 - 05:20pm: Congress Closing Remarks (LOCATION: Ballroom 7)