

2017 IEEE CyberSciTech/DASC/PICom/DataCom Timetable

Venue: Holiday Inn Orlando-Disney Springs, USA

Day 1 (Monday, 6th November 2017)				
10:00-18:00	Registration /Pre Function Space/Ballroom Foyer			
13:00-15:00	Tutorial I (Xiaolin Li) /Como/Sheen			
15:00-15:30	Afternoon tea			
15:30-17:30	Tutorial II (Wenbing Zhao) /Como/Sheen			
18:00-20:00	Welcome reception /Royal/Sable meeting room			
Day 2 (Tuesday, 7th November 2017)				
Time	Room 1 /Sheen	Room 2 /Lucerne	Room 3 /Emerald	Room 4 /Como
08:00-18:00	Registration /Pre Function Space/Ballroom Foyer			
08:30-09:20	CyberSciTech/DASC/PICom/DataCom Conference Opening /Lakes Ballroom			
09:20-10:00	Keynote I (Kien A. Hua) /Lakes Ballroom			
10:00-10:40	Keynote II (Adnan Al-Anbuky) /Lakes Ballroom			
10:40-11:00	Morning tea /Ballroom Foyer			
11:00-12:00	CyberSciTech/PICom/DataCom Poster Session /Gallery			
12:00-13:00	Lunch /Palm Breezes Restaurant			
13:00-15:20	DataCom Session 1	CyberSciTech Session 1	DASC Session 1	PICom Session 1
15:20-15:40	Afternoon tea /Ballroom Foyer			
15:40-18:00	DataCom Session 2	CyberSciTech Session 2	DASC Session 2	PICom Session 2
Day 3 (Wednesday, 8th November 2017)				
Time	Room 1 /Sheen	Room 2 /Lucerne	Room 3 /Emerald	Room 4 /Como
08:30-18:00	Registration /Pre Function Space/Ballroom Foyer			
08:40-09:30	Keynote III (Scott Klasky) /Lakes Ballroom			
09:30-10:10	Keynote IV (Yanchun Zhang) /Lakes Ballroom			
10:10-10:30	Morning tea /Ballroom Foyer			
10:30-12:00	Joint Panel /Lakes Ballroom			
12:00-13:00	Lunch /Palm Breezes Restaurant			
13:00-15:20	DataCom Session 3	CyberSciTech Session 3	DASC Session 3	PICom Session 3
15:20-15:40	Afternoon tea /Ballroom Foyer			
15:40-18:00	DataCom Session 4	CyberSciTech Session 4	DASC Session 4	Cyber-ESEH
19:00-22:00	Banquet /Lakes Ballroom			
Day 4 (Thursday, 9th November 2017)				
Time	Room 1 /Sheen	Room 2 /Lucerne	Room 3 /Emerald	Room 4 /Como
08:30-16:00	Registration /Pre Function Space/Ballroom Foyer			
08:50-09:40	Keynote V (Feng Xia)	Cyber-SC & Cyber-EA	DASC Session 5	Cyber-ACE
09:40-10:20	Keynote VI (Yutong Lu)			
10:20-10:40	Morning tea /Ballroom Foyer			
10:40-11:20	Keynote VII (Geyong Min)	Cyber-IoT	DASC Short Paper Session 1	PICom Short Paper Session
11:20-12:00	Keynote VIII (Rich Wolski)			
12:00-13:00	Lunch /Palm Breezes Restaurant			
13:00-15:20	DataCom Session 5	CyberSciTech Session 5	DASC Short Paper Session 2	DataCom Session 7
15:20-15:40	Afternoon tea /Ballroom Foyer			
15:40-18:00	DataCom Session 6	CyberSciTech Short Paper Session	DASC Short Paper Session 3	DataCom Short Paper Session
18:00-18:20	Conference Closing			
Day 5 (Friday, 10th November 2017)				
09:30-11:30	Research visit and discussion at UCF			

**2017 IEEE Cyber Science and Technology Congress (CyberSciTech)
15th IEEE Intl Conf on Dependable, Autonomic and Secure Computing (DASC)
15th IEEE Intl Conf on Pervasive Intelligence and Computing (PICom)
3rd IEEE Intl Conf on Big Data Intelligence and Computing (DataCom)**

Venue: Holiday Inn Orlando-Disney Springs, USA Date: 6-10th November 2017

Tutorials

Tutorial I: Xiaolin Li, University of Florida, USA

Deep Learning: Towards Intelligence-Driven Society

Tutorial II: Wenbing Zhao, Cleveland State University, USA

Human Activity and Emotion Tracking with Microsoft Kinect and Wearable Devices

Keynotes

Keynote I: Kien Hua, University of Central Florida, USA

Emerging Cyber-Human Workplaces with Internet of Things: Challenges and Opportunities

Keynote II: Adnan Al-Anbunkey, Auckland University of Technology, New Zealand

Software Defined Wireless Sensor Network Systems: Towards CPS Intelligence

Keynote III: Scott Klasky, The University of Tennessee, Knoxville, USA

Enhancing Scientific Data Management for Exascale

Keynote IV: Yanchun Zhang, Victoria University, Australia

Smart Health: Medical Data Mining and Innovative Applications in Patient Monitoring and Aging Care

Keynote V: Feng Xia, Dalian University of Technology, China

Embracing Computational Social Science: In the Name of Data

Keynote VI: Yutong Lu, National University of Defense Technology (NUDT), China

Convergence of HPC and Bigdata on Tianhe-2

Keynote VII: Geyong Min, University of Exeter, UK

Data-Driven Knowledge Discovery and Intelligence for Future Internet

Keynote VIII: Rich Wolski, University of California, Santa Barbara (UCSB), USA

Multi-scaling the Cloud for the Internet of Things

Joint Panel

Topic: Cybermatics in 2025

Panel Moderators:

Zhong Chen, Beijing University, China

Runhe Huang, Hosei University, Japan

Panelists:

Stephen S. Yau, Arizona State University, USA

Frank Hsu, Fordham University, USA

Yi Pan, Georgia State University, USA

Paulo Pires, Federal University of Rio de Janeiro (UFRJ), Brazil

Yanchun Zhang, Victoria University, Australia

Klimis Ntalianis, Athens University of Applied Sciences, Greece

CyberSciTech 2017 Sessions

CyberSciTech Session 1: Cyber Human Science and Computing
CyberSciTech Session 2: Cyber Physical Computing and Systems I
CyberSciTech Session 3: Cyber Physical Computing and Systems II
CyberSciTech Session 4: Cyber Science and Fundamentals
CyberSciTech Session 5: Cyber Communications and Security
CyberSciTech Short Paper Session
CyberSciTech Poster Paper Session
Cyber-ESEH: Special Session on Cyber-Enabled Smart Environment and Healthcare
Cyber-IoT: Special Session on Computing and Applications for Cyber Internet of Things
Cyber-SC&Cyber-EA: Special Session on Cyber Social Computing and Cyber-Enabled Applications
Cyber-ACE: Workshop on Cyber Apps, Cyber and Economy

DASC 2017 Sessions

DASC Session 1: Secure Computing I
DASC Session 2: Secure Computing II
DASC Session 3: Autonomic Computing
DASC Session 4: Dependable Computing
DASC Session 5: Real-time Systems
DASC Short Paper Session 1: Dependable Computing
DASC Short Paper Session 2: Secure Computing I
DASC Short Paper Session 3: Secure Computing II

PICom 2017 Sessions

PICom Session 1: IoT, Cloud and Mobile Computing
PICom Session 2: Services for Pervasive Computing
PICom Session 3: Pervasive Intelligence
PICom Short Paper Session
PICom Poster Paper Session

DataCom 2017 Sessions

DataCom Session 1: Deep Learning and Large Scale Systems
DataCom Session 2: Big Data Science, Theorems and Analytics I
DataCom Session 3: Big Data Science, Theorems and Analytics II
DataCom Session 4: Big Data Analysis and Complex Applications I
DataCom Session 5: Big Data Analysis and Complex Applications II
DataCom Session 6: Big Data Infrastructure, Clouds and HPC I
DataCom Session 7: Big Data Infrastructure, Clouds and HPC II
DataCom Short Paper Session
DataCom Poster Paper Session

CyberSciTech 2017

CyberSciTech Session 1: Cyber Human Science and Computing

1. **MMHG: Multi-Modal Hypergraph Learning for Overall Survival After D2 Gastrectomy for Gastric Cancer**, Zhikui Chen, Fei Lu, Xu Yuan, Qiu Li, Zedong Du, Li Luo, and Fengyi Zhang
2. **Respiratory Sounds Feature Learning with Deep Convolutional Neural Networks**, Yongpeng Liu, Yusong Lin, Zongmin Wang, Guanling Chen, Shan Gao, Hongpo Zhang, and Yang Gao
3. **Incentivization for Health Crowdsensing**, Robert Steele
4. **Deep Convolution Neural Network Discriminator for Distinguishing Seborrheic Keratosis and Flat Warts**, Kehua Guo, Ting Li, Runhe Huang, and Jian Kang
5. **An Integrative and Precise Approach in Personality Computing Based on Ontic Personae Modeling**, Ao Guo and Jianhua Ma
6. **Identifying Image Tags from Instagram Hashtags Using the HITS Algorithm**, Stamatios Giannoulakis, Nicolas Tsapatsoulis, and Klimis Ntalianis

CyberSciTech Session 2: Cyber Physical Computing and Systems I

1. **A Learning-Based Framework for Two-Dimensional Vehicle Maneuver Prediction over V2V Networks**, Hossein Nourkhiz Mahjoub, Amin Tahmasbi-Sarvestani, Hadi Kazemi, and Yaser P. Fallah
2. **Analysis of the Impact of Driver Behavior Models on Performance of Forward Collision Warning Systems**, Ahmad Jamialahmadi and Yaser P. Fallah
3. **A Bus Arrival Time Prediction Method Based on GPS Position and Real-time Traffic Flow**, Jianmei Lei, Dongmei Chen, Fengxi Li, Qingwen Han, Siru Chen, Lingqiu Zeng, and Min Chen
4. **Data-Based Analysis of Sampling and Estimation Methods for Vehicle Tracking over Wireless Networks**, Masoumeh Kalantari-Khandani, Wasfy Mikhael, Yaser P. Fallah, and Katerina Goseva-Popstojanova
5. **Application of Adaptive Genetic Algorithm for Multimodal Transportation Logistics Distribution Routing Problem**, Zhe Sun, Zhixin Sun, Xuejian Zhao, Long Jin, and Wei Zhang
6. **A Comparison of Hash-Based Methods for Trajectory Clustering**, Maede Rayatidamavandi, Yu Zhuang, and Mahshid Rahnamay Naeini

CyberSciTech Session 3: Cyber Physical Computing and Systems II

1. **Feature-Based Temporal Statistical Modeling of Data Streams from Multiple Wearable Devices**, Tongtong Xu, Ao Guo, Jianhua Ma, and Kevin I-Kai Wang
2. **Locality-Driven Dynamic Flash Cache Allocation**, Liang Xu, Qianbin Xia, and Weijun Xiao
3. **A Memory Capacity-Aware Algorithm for Fast Clustering of Disk-Resident Big Datasets**, Ahmad O. Aseeri, Yu Zhuang, and Mohammed Alkathiri

4. **Caching Scheme with Edge Nodes for Mobile Cyber Physical Systems**, Qichao Xu, Zhou Su, Yilong Hui, and Qing Yang
5. **Anomaly Detection Technology for Streaming Data of Wearable Medical Devices**, Peipei Wang, Yutong Han, Jing Qin, Bin Wang, Xiaochun Yang
6. **A Real Example of the Batdam Stone in Jong Nang and Tomb Gate of Jeju Island Its Applications to Cyber Physical Human Science IoT**, Moon Ho Lee

CyberSciTech Session 4: Cyber Science and Fundamentals

1. **Semantic Neuron Networks Based Associative Memory Model**, Peter Mungai, Runhe Huang, Zhong Chen, and Xiaokang Zhou
2. **Pairwise Preference over Mixed-Type Item-Sets Based Bayesian Personalized Ranking for Collaborative Filtering**, Shan Gao, Guibing Guo, Yusong Lin, Xingjin Zhang, Yongpeng Liu, and Zongmin Wang
3. **On Extraction of Rules from Deep Learner: the Deeper, the Better?**, Tomoya Furukawa and Qiangfu Zhao
4. **Learning to Diversify Recommendations Based on Matrix Factorization**, Shuang Li, Yuezhi Zhou, Di Zhang, Yaoxue Zhang, and Xiang Lan
5. **A Survey of Semantics-Aware Performance Optimization for Data-Intensive Computing**, Liqiang Wang and Bingbing Rao
6. **A Smart Visual Analysis Solution for MOOC Data**, Xiu Li, Chang Men, Fan Zhang, and Zhihui Du
7. **Research Hotspots and Trends in Cyberspace: From 1989 to 2016**, Zili Li, Li Zeng, and Zhigang Luo

CyberSciTech Session 5: Cyber Communications and Security

1. **Design Considerations for Cyber Security Testbeds: A Case Study on a Cyber Security Testbed for Education**, Maria Leitner, Maximilian Frank, and Timea Pahi
2. **Detecting Android Malware Based on Extreme Learning Machine**, Yuxia Sun, Yunlong Xie, Zhi Qiu, Yuchang Pan, Jian Weng, and Song Guo
3. **Co_Hijacking Monitor: Collaborative Detecting and Locating Mechanism for HTTP Spectral Hijacking**, Pan Wang and Xuejiao Chen
4. **A Study on Communication Network Reliability for Advanced Metering Infrastructure in Smart Grid**, Shengjie Xu, Yi Qian, and Rose Qingyang Hu
5. **Interference Management for Physical Layer Security in Heterogeneous Networks**, Dongfeng Fang, Yi Qian, and Rose Qingyang Hu
6. **Exploiting Mobile Sensing Data for Media Caching in Mobile Edge Networks**, Zi Wang, Zhiwei Zhao, Geyong Min, Zifei Zhao, and Xinyuan Huang

CyberSciTech Short Paper Session:

1. **An Ontology-Based Framework for Organization Information Extraction**, Tengku Adil Tengku Izhar and Bernady O. Apduhan

2. **Exploring the Production of "The Belt and Road"-Driven Animations with Crowdsourcing Model**, Wu Ting, Fei Hao, and Mijin Kim
3. **Re-Thinking Online Offenders' SKRAM: Individual Traits and Situational Motivations as Additional Risk Factors for Predicting Cyber Attacks**, David Maimon, Steve Hinton, Olga Babko-Malaya, and Rebecca Cathey
4. **Holographic Real Time 3D Heart Visualization from Coronary Tomography for Multi-place Medical Diagnostics**, Arthur Bucioli, Gerson Flavio Lima, Edgard Lamounier, Alexandre Cardoso, Isabela Peres, Gabriel Cyrino, Milton Neto, and Roberto Botelho
5. **A Practical Cyber-Physical System for the Self-Capture of the Effect of Exercise on Blood Glucose Levels**, Robert Steele
6. **Exploring Authentication and Access Control for an IoT Green Roof Monitoring System**, Feng Ye, Yujun Sun, and Andrew J. Rettig
7. **Use of Switching Controllers for Mitigation of Active Identification Attacks in Networked Control Systems**, Alan Sá, Luiz Fernando Costa Carmo, and Raphael Machado

CyberSciTech Poster Paper Session:

1. **Development of a Platform-Independent Software Tool for Management of X.509 Certificates from Diverse Certificate Stores**, Thomas Fiedl, Henning Schneider, and Miloslava Plachkinova
2. **Plausible Deniability for ISP Log and Browser Suggestion Obfuscation with a Phrase Extractor on Potentially Open Text**, Ronald Loui
3. **Information Warfare Amplified by Cyberwarfare and Hacking the National Knowledge Infrastructure**, Ronald Loui
4. **Enabling High-Resolution Video Support for the Next-Generation Internet-Connected Display**, Yu-Pei Liang, Shuo-Han Chen, Yi-Han Lien, Tseng-Yi Chen, Heng-Yin Chen, and Wei-Kuan Shih

Special Session on Cyber-Enabled Smart Environment and Healthcare (Cyber-ESEH):

1. **Center of Mass Estimation Using Motion Capture System**, Gabriel Ploof, Bassam Alqahtani, Farwan Alghamdi, Garret Flynn, and Cai Xia Yang
2. **Buddy: A Virtual Life Coaching System for Children and Adolescents with High Functioning Autism**, Xiongyi Liu and Wenbing Zhao
3. **Towards a Technology-Enabled Environment of Care for Nursing Homes**, Qing Wu and Wenbing Zhao
4. **A Survey on Smart Wearables in the Application of Fitness**, Hao Qiu, Xianping Wang, and Fei Xie
5. **Towards User-Centered Assistance in Smart Environments Based on Device Metadata**, Marius Khan, Sabine Sachweh, and Albert Zündorf
6. **AED: Adaptive Energy-efficient Data Transmission Scheme for Heart Disease Detection**, Lokesh Sharma, Albert Christian, and Shih-Lin Wu
7. **Improving Wake-Up-Word and General Speech Recognition Systems**, Veton Këpuska and Gamal Bohouta

Special Session on Computing and Applications for Cyber Internet of Things (Cyber-IoT):

1. **QoE Based Optimization for Cyber Vehicular Networks**, Hui Hui and Rui Xing
2. **Security Analysis of Simple Network Management Protocol Based IEEE P21451 Internet of Things**, Xinzheng Feng, Jun Wu, Kuan Wang, Jianhua Li, and Meng Wang
3. **Performance Comparison of Base Station On/Off and Base Station Cooperative Transmission in Ultra-Dense Network**, Junjie Pei, Zhuoxuan Ju, Hengdong Ye, Bibo Wu, and Shu Fu
4. **Joint Base Station Cooperative Transmission and ON-OFF Mechanism in Internet of Things Networks**, Zhuoxuan Ju, Hengdong Ye, Bibo Wu, and Shu Fu
5. **A View on Key Technology of Secure and Efficient Data Transmission for Active Distribution Networks**, Song Deng and Kun Wang

Special Session on Cyber Social Computing and Cyber-Enabled Applications (Cyber-SC & Cyber-EA):

1. **Flexible Analysis of Cross-Organizational Process Modeling Based on π -Calculus**, Ninglin Xu, Jiulei Jiang and Xiaofeng Wang
2. **Formalization of Business Process with Flexibility Based on Service Interaction**, Yaya Liu, Lingyu Xu, Jiulei Jiang, and Lishuang Zhao
3. **CF-Cluster: Clustering Bike Station Based on Common Flows**, Liangxu Liu, Bo Guan, Dayao Gong, and Junyao Xiao

Workshop on Cyber Apps, Cyber and Economy (Cyber-ACE):

1. **A Study of Physical Layer Techniques for 5G and Its Security Issues**, Yuping Zhao, Geng Li, and Wanyue Qu
2. **Develop a Detection System for Colour Stego Images Using Discrete Wavelet Transformation**, Saad Amin and Moumita Malek
3. **ROS Cyber Security**, Xiaohua Feng and Iroshan Abeykoon
4. **Cyber-Stalking Issues**, Xiaohua Feng, Audrey Asante, and Emma Short

DASC 2017

DASC Session 1: Secure Computing I

1. **Preserving Data Integrity in IoT Networks under Opportunistic Data Manipulation**, Shameek Bhattacharjee, Mehrdad Salimitari, Mainak Chatterjee, Kevin Kwiat, and Charles A. Kamhoua
2. **Colluded Applications Vulnerabilities in Android Devices**, Igor Khokhlov and Leon Reznik
3. **On Sustaining Prolonged Interaction with Attackers**, Roberto Vergaray and Julian Rrushi
4. **Defending Electrical Substations against 0-day Malware through Decoy I/O in Protective Relays**, Julian Rrushi
5. **Discovering Hidden Correlations on Tor**, Gianluigi Me and Liberato Pesticcio
6. **Wireless Spoofing-Attack Prevention Using Radio-Propagation Characteristics**, Takatsugu Ono, Osamu Muta, Haruichi Kanaya, and Koji Inoue
7. **Genetic Algorithm-Based Intrusion Detection System for Web Services**, Hossain Shahriar and William Bond

DASC Session 2: Secure Computing II

1. **Spatial-Temporal Anomaly Detection Using Security Visual Analytics via Entropy Graph and Eigen Matrix**, Matthew Sinda and Qi Liao
2. **Towards a Storage-Efficient and Categorized Secure Log Structure Scheme for Embedded Systems**, Sérgio Câmara, Luci Pirmez, and Luiz Fernando Costa Carmo
3. **Software Security Testing via Misuse Case Modeling**, Samer Khamaiseh and Dianxiang Xu
4. **Target Discovery Differentials for 0-Knowledge Detection of ICS Malware**, Samer Khamaiseh and Dianxiang Xu
5. **PhishBox: An Approach for Phishing Validation and Detection**, Jhen-Hao Li and Sheng-De Wang
6. **Bot Classification for Real-Life Highly Class-Imbalanced Dataset**, Sarah Harun, Tanveer Hossain Bhuiyan, Song Zhang, Hugh Medal, and Linkan Bian
7. **A Hierarchic Secure Cloud Storage Scheme Based on Fog Computing**, Jiyuan Zhou, Tian Wang, Md Zakirul Alam Bhuiyan, and Anfeng Liu

DASC Session 3: Autonomic Computing

1. **Energy-Efficient Computation Automatic Offloading in Mobile Edge Computing**, Changqing Luo, Sergio Salinas, Ming Li, and Pan Li
2. **Asynchronous Agent Teams for Collaborative Tasks Based on Bottom-Up Alliance Formation and Adaptive Behavioral Strategies**, Masahi Hayano, Naoki Iijima, and Toshiharu Sugawara
3. **Graphical Animations of State Machines**, Tam Nguyen and Kazuhiro Ogata,
4. **Revisiting Shamir's No-key Protocol: Lightweight Key Transport**, Adnan Kılıç, Ertan Onur, and Cansu Betin Onur

5. **Deadlock Detection in the Scheduling of Last-Mile Transportation Using Model Checking**, Koji Hasebe, Mitsuaki Tsuji, and Kazuhiko Kato
6. **A Comparative Study of Algorithm for Computing Strongly Connected Components**, Frank Hsu, Xiaojie Lan, Gabriel Miller, and David Baird

DASC Session 4: Dependable Computing

1. **Fault-Tolerant Network-Server Architecture for Time-Critical Web Applications**, Kutalmis Akpınar, Fereshteh Jafariakinabad, Kien Hua, Omar Nakhila, Jun Ye, and Cliff Zou
2. **On Basis Variables for Efficient Error Detection**, Jake Fairbrother and Matthew Leeke
3. **SAFARI-Taxi: Secure, Autonomic, Fault-Resilient, and Intelligent Taxi Hailing System**, Mohammad A. Hoque, Phil Pfeiffer, Sanford Gabrielle, Edward Hall, and Elizabeth Turbyfill
4. **Validating the Correctness of Outsourced Computational Tasks Using Pseudorandom Number Generators**, Yaohang Li, Ravi Mukkamala, and Michael Mascagni
5. **Specifying Functional Requirements and QoS Parameters for IoT Systems**, Bruno Costa, Paulo F. Pires, and Flávia Coimbra Delicato
6. **Adaptive Zone Replication for Structured Peer-to-Peer Systems**, Shigeki Yoneda and Naohiro Hayashibara

DASC Session 5: Real-time Systems

1. **A 3D-Collaborative Wireless Network: Towards Resilient Communication for Rescuing Flood Victims**, Md Arafatur Rahman, Munirul Hasan, A. Taufiq Asyhari, and Md Zakirul Alam Bhuiyan
2. **Systematic Test Generation for Secure Hardware Supported Virtualization**, Senwen Kan and Jennifer Dworak
3. **Approximate Power Grid Protection Against False Data Injection Attacks**, Kelvin Ly, Kevin Kwiat, Charles A. Kamhoua, Laurent Njilla, and Yier Jin
4. **Securing Real-Time Cyber-Physical Systems Using WCET-Aware Artificial Diversity**, Joachim Fellmuth, Tobias Pfeffer, Paula Herber, and Sabine Glesner

DASC Short Paper Session 1: Dependable Computing

1. **Classification of Hierarchical Fault-Tolerant Design Patterns**, Kai Ding, Andrey Morozov, and Klaus Janschek
2. **Holographic Memory Calculation FPGA Accelerator for Optically Reconfigurable Gate Array**, Minoru Watanabe
3. **Temporal Variation of Trust in Dependable Systems**, Sudip Chakraborty
4. **Modular Norm Models: A Lightweight Approach for Modeling and Reasoning about Legal Compliance**, Sayonna Mandal, Robin Gandhi, and Harvey Siy
5. **Hybrid Analysis of Intent Mechanism Vulnerabilities of Inter-Process Communication in Android Smartphones**, Babu Khadiranaikar

DASC Short Paper Session 2: Secure Computing I

1. **Active Malware Countermeasure Approach for Mission Critical Systems**, Zachary Thomas and Sherif Abdelwahed
2. **Combating Data Leakage Trojans in Sequential Circuits Through Randomized Encoding**, Travis Schulze, Yiyu Shi, Daryl Beetner, Kevin Kwiat, Charles A. Kamhoua, and Laurent Njilla
3. **A Simulation Study to Detect Attacks on Internet of Things**, Dave Eastman and Satish Kumar
4. **Web-Based Malware Mitigation with a Virtualized Web-Browser: A Comparison Study**, Haklin Kimm
5. **A Formal Verification Strategy for a Context-Aware Access Control Implementation's Confidentiality in the Internet of Things**, Douglas Simões Silva, Jean Martina, Rebecca Montanari, and Luca Foschini
6. **A Framework for Zero Day Exploit Detection and Containment**, Richard Ciancioso, Danvers Budhwa, and Thaier Hayajneh
7. **Electromagnetic Warfare and the Cybersecurity Threat**, Damianos Pinou, Rien Chy, and Thaier Hayajneh
8. **Autonomic Threat Avoidance and Self-Healing in DBMS**, Wajahat Munir, Basit Raza, Adeel Anjum, and Ahmad Kamran Malik
9. **An Optimized Spin-Based Approach for OSEK/VDX Applications**, Haitao Zhang and Jianwen Xiang

DASC Short Paper Session 3: Secure Computing II

1. **Secrecy Capacity and Energy Efficiency Evaluation of RLS - Kaiser Based Smart Antenna System**, Hailu Belay Kassa, Kevin Kornegay, Yacob Astatke, and Marcial Tienteu
2. **RED-Based Model for Detecting and Avoiding Anomaly Network Congestion**, Abdulghani Ali Ahmed
3. **Hardening the Client-Side: A Guide to Enterprise-Level Hardening of Web Browsers**, Ananth Jillepalli, Daniel Conte de Leon, Frederick T. Sheldon, and Michael Haney
4. **WiP: A Probabilistic Study of the Relationship of Deception with Attacker Skills**, Sharif Hassan and Ratan Guha
5. **Towards a Real Time Framework for Monitoring IoT Devices for Attack Detection**, Rafael I. Bonilla and Cristina L. Abad
6. **A Metric for Measuring IoT Devices Security Levels**, Rafael I. Bonilla, Juan J. Crow, Luigi Basantes, and Luis Cruz
7. **Automated Lecture Time-Tabling System for Tertiary Institutions**, Jumoke Soyemi, Lekan Akinode, and Samson Oloruntoba
8. **Structural Feature Engineering Approach for Detecting Polymorphic Malware**, Emmanuel Masabo, Kyanda Swaib Kaawaase, Julianne Sansa-Otim, and Damien Hanyurwimfura
9. **A Secure and Dependable Connected Smart Home System for Elderly**, Abdulhameed Alelaiwi, Mohammad Mehedi Hassan, and Md Zakirul Alam Bhuiyan

PICom 2017

PICom Session 1: IoT, Cloud and Mobile Computing

1. **A Dimension Reduction Model and Classifier for Anomaly-based Intrusion Detection in Internet of Things**, Shengchu Zhao, Wei Li, Tanveer A. Zia, Charles Sturt, and Albert Zomaya
2. **A Multiscale Approach for a Distributed Event-Based Internet of Things**, Denis Conan, Léon Lim, Chantal Taconet, Sophie Chabridon, and Claire Lecocq
3. **Quantifying Cloud Elasticity on Pervasive Devices with Container-Based Auto-Scaling**, Xuxin Tang, Fan Zhang, Xiu Li, Zhijiang Li, and Samee U. Khan
4. **Real-Time Incident Clearance Time Prediction Using Traffic Data from Internet of Mobility Sensors**, Hamzah Al-Najada and Imad Mahgoub
5. **VANET Adaptive Beaconing Based on Fuzzy Logic**, Mohammed Alhameed and Imad Mahgoub
6. **Investigating the Impact of Adaptive Beaconing on GEOADV Performance**, Joanne Skiles and Imad Mahgoub

PICom Session 2: Services for Pervasive Computing

1. **Self-Adaptive Energy-Efficient Applications: The HADAS Developing Approach**, Nadia Gamez, José-Miguel Horcas, Monica Pinto, and Lidia Fuentes
2. **A Multi-Sensor Data Fusion Technique for Multi-Application Wireless Sensor Networks Based on Overlapping Intervals**, Claudio M. Farias and Luci Pirmez
3. **Optimizing MapReduce Partitioner Using Naive Bayes Classifier**, Lei Chen, Wei Lu, Liqiang Wang, Ergude Bao, Weiwei Xing, and Yong Yang
4. **Intelligent Subevent Detection Based on Social Network Data**, Diogo Nolasco and Jonice Oliveira
5. **EVINCED: Integrity Verification Scheme for Embedded Systems Based on Time and Clock Cycles**, Cristiano Castro, Sérgio Câmara, Davidson Rodrigo Boccoardo, and Luiz Fernando Costa Carmo
6. **Achieving Green Security in Pervasive Computing Using the HADAS Toolkit**, Daniel-Jesus Munoz Guerra, Jose Antonio Montenegro Montes, Monica Pinto, and Lidia Fuentes

PICom Session 3: Pervasive Intelligence

1. **Deep Spectral-Spatial Feature Extraction Based on DCGAN for Hyperspectral Image Retrieval**, Lu Chen, Jing Zhang, Xi Liang, Jiafeng Li, and Zhuo Li
2. **Robust Radial Distortion Correction from a Single Image**, Le Li, Weibin Liu, and Weiwei Xing
3. **Image Enhancement Based on Spatial Multi-Scale Homomorphic Filtering and Local Entropy Guided Image Filtering**, Sisi Han, Weibin Liu, and Weiwei Xing
4. **A Novel Method for Human Motion Capture Data Segmentation**, Ziyi Wu, Weibin Liu, and Weiwei Xing
5. **A Weighted MHOF and Sparse Representation Based Crowd Anomaly Detection Algorithm**, Yujie Chen and Suyu Wang

PICom Short Paper Session:

1. **An Empirical Study of Power Consumption of Web-based Communications in Mobile Phones**, Inmaculada Ayala Viñas, Mercedes Amor Pinilla, Lidia Fuentes, and Daniel-Jesus Munoz Guerra
2. **Online Deceptive Product Review Detection Leveraging Word Embedding**, Xiu Li, Lulu Xie, Fan Zhang, and Huimin Wang
3. **On Feature Selection for the Prediction of Phishing Websites**, Wesam Fadheel
4. **Ring - Should I Interrupt or Not? - A Mobile Interruption Management System**, Mohammad Kayes Kaykobad, Praveen Madiraju, and Sheikh Iqbal Ahamed
5. **A Deep-Learning-Based Floor Detection System for the Visually Impaired**, Yueng Delahoz and Miguel Labrador

PICom Poster Paper Session:

1. **Curation of Physical Objects in Botany: Architecture and Development of a Linked Open Data-Based Application**, Marcela Mayumi Mauricio Yagui, Luís Fernando Monsores Passos Maia, Jonice Oliveira, and Adriana Vivacqua
2. **A Deep Convolutional Network Demodulator for Mixed Signals with Different Modulation Types**, Xuming Lin, Ruifang Liu, Wenmei Hu, and Yameng Li
3. **Threat Evaluation of Aerial Targets in an Air Defense System Using Bayesian Networks**, José Fernando Basso Brancalioni, and Karl H. Kienitz

DataCom 2017

DataCom Session 1: Deep Learning and Large Scale Systems

1. **Mixture Self-Paced Learning for Multi-View K-Means Clustering**, Hong Yu, Yahong Lian, Xiujuan Xu, and Xiaowei Zhao
2. **Combining Weather Condition Data to Predict Traffic Flow: A GRU Based Deep Learning Approach**, Da Zhang and Mansur R. Kabuba
3. **An Online-Offline Combined Big Data Mining Platform**, Hao Lv, Weishan Zhang, Liang Xu, Xi Liu, Qinghua Lu, and Yan Liu
4. **Attribute-Based Partner Switching Boosts Cooperation in Social P2P Systems**, Linlin Tian, Mingchu Li, Hong Yu, and Xing Jin
5. **A Modified Node2vec Method for Disappearing Link Prediction**, Lu Li, Wei Wang, Shuo Yu, Liangtian Wan, Zhenzhen Xu, and Xiangjie Kong
6. **DeepCancer: Detecting Cancer via Deep Generative Learning through Gene Expressions**, Rajendra Bhat, Vivek Viswanath, and Xiaolin Li
7. **Using Deep Learning to Predict and Optimize Hadoop Data Analytic Service in a Cloud Platform**, Chen-Chun Chen, Yu-Tung Hsiao, Jerry Chou, and Chan-Yi Lin

DataCom Session 2: Big Data Science, Theorems and Analytics I

1. **Understanding Travel Behavior of Private Cars via Trajectory Big Data Analysis in Urban Environments**, Dong Wang, Qian Liu, Zhu Xiao, Jie Chen, Yourong Huang, and Weiwei Chen
2. **Team Recognition in Big Scholarly Data: Exploring Collaboration Intensity**, Shuo Yu, Feng Xia, Kaiyuan Zhang, Zhaolong Ning, Jiaofei Zhong, and Chengfei Liu
3. **Perldoop2: A Big Data-Oriented Source-to-Source Perl-Java Compiler**, César Piñeiro, José M. Abuín, and Juan C. Pichel
4. **Availability Modeling and Assurance of Map-Reduce Computing**, Zuqiang Ke and Nohpill Park
5. **A Data-Driven Resource Allocation Method for Personalized Container Based Desktop as a Service**, Hyeon-Ji Baek and Eui-Nam Huh
6. **Analysis of Projected 2024 Employment Based on Current Computer Science Graduates in U.S.**, Dejang Liu

DataCom Session 3: Big Data Science, Theorems and Analytics II

1. **Repair Duality with Locally Repairable and Locally Regenerating Codes**, Danilo Gligoroski, Katina Kravevska, Rune E. Jensen, and Per Simonsen
2. **Efficient Parallel K-Means on MapReduce Using Triangle Inequality**, Sami Al. Ghamdi and Giuseppe Di Fatta
3. **Facilitating Reproducible Computing via Scientific Workflows for Modelling and Data Integration**, Yuan Cao and Yao Liang
4. **A High-dimensional Outlier Detection Algorithm Base on Relevant Subspace**, Zhipeng Gao, Yang Zhao, Kun Niu, and Yidan Fan
5. **Discriminatively Local Hashing for Preserving Semantic Manifold**, Xiaopeng Zhang, Hui Zhang, Rui Liu, Yong Chen, and Zhiwen Ye

6. **Integrated Discovery of Location Prediction Rules in Mobile Environment**, Elahe Elahe Naserian, Xinheng Wang, Xiaolong Xu, Yuning Dong, Nektarios Georgalas, and Kaizhu Huang
7. **Inferring Workflows with Job Dependencies from Distributed Processing Systems Logs**, Cristina Abad and Gladys Carrillo

DataCom Session 4: Big Data Analysis and Complex Applications I

1. **Forecasting Stock Prices Using Social Media Analysis**, Scott Coyne, Praveen Madiraju, and Joseph Coelho
2. **Automatically Finding Matches Between Social Media Posts and News Articles**, Filipe Miranda and Álvaro Figueira
3. **Real-Time Event Search Corresponding to Place and Time Using Social Stream**, Ruriko Kudo, Miki Enoki, Akihiro Nakao, Shu Yamamoto, Saneyasu Yamaguchi, and Masato Oguchi
4. **Contextual Polarity and Influence Mining in Online Social Networks**, Hassan Alzahrani, Philippe Duverger, and Nam Nguyen
5. **Scalable Mining and Analysis of Protein-Protein Interaction Networks**, Shaikh Arifuzzaman and Bikesh Pandey
6. **A Time-Delayed Information-Theoretic Approach to the Reverse Engineering of Gene Regulatory Networks Using Apache Spark**, Yasser Abdullaah, Jason T. L. Wang, and Tao Yu

DataCom Session 5: Big Data Analysis and Complex Applications II

1. **Convolutional Filtering for Accurate Signal Timing from Noisy Streaming Data**, Jonathan Wang, Kesheng Wu, Alex Sim, and Seongwook Hwangbo
2. **On the Measurement and Analysis of Safety in Los Angeles**, Rami Ibrahim and Omair Shafiq
3. **Optimizing NBA Player Selection Strategies Based on Salary and Statistics Analysis**, Ramya Nagarajan and Lin Li
4. **Online Review Analysis by Visual Feature Selection**, Keerthika Koka and Shiaofen Fang
5. **Exploring Dynamic Granules for Time-Varying Big Data**, Zhengxin Chen
6. **A Scalable Fair Heterogeneous Resource Allocation Scheme in Distributed Systems**, Xiaoying Zheng and Ye Xia
7. **General Time-Dependent Sequenced Route Queries in Road Networks**, Mohammad Hossein Ahmadi and Vahid Haghghatdoost

DataCom Session 6: Big Data Infrastructure, Clouds and HPC I

1. **A Dynamic Power Management Schema for Multi-Tier Data Centers**, Aryan Azimzadeh and Nasseh Tabrizi
2. **An Adaptive Initial Cluster Centers Selection Algorithm for High-dimensional Partition Clustering**, Zhipeng Gao, Yidan Fan, Kun Niu, and Ting Wang

3. **Super-Scalable Computation Framework for Automated Terrain Identification**, Yupeng Yan, Manu Sethi, Anand Rangarajan, and Sanjay Ranka
4. **CENTAURUS: A Cloud Service for K-Means Clustering**, Nevena Golubovic, Angad Gill, Chandra Krintz, and Rich Wolski
5. **Incremental Hybrid SDN Deployment for Enterprise Networks**, Ming-Hung Chen, Wei-Min Wang, I-Hsin Chung, and Cheng-Fu Chou
6. **DR-Update: A Dual-Level Relay Scheme in Erasure-Coded Storage Systems for Balanced Updates**, Mingzhu Deng, Songping Yu, Xiao Nong, Fang Liu, and Zhiguang Chen

DataCom Session 7: Big Data Infrastructure, Clouds and HPC II

1. **PTree: Direct Lookup with Page Table Tree for NVM File Systems**, Jianqiang Zeng, Nong Xiao, Fang Liu, Lingyu Zhu, and Yang Li
2. **Promoting MLC STT-RAM for the Future Persistent Memory System**, Xunchao Chen, Jun Wang, and Jian Zhou
3. **Analysis and Modeling of Resource Management Overhead in Hadoop YARN Clusters**, Janardhanan Purackel Sankaran and Philip Samuel
4. **File System for Non-Volatile Main Memories: Performance Testing and Analysis**, Yang Li, Fang Liu, Nong Xiao, and Songping Yu
5. **Predicting Hospital Length of Stay Using Neural Networks on MIMIC III Data**, Robert Steele, Thanos Gentimis, Ala J Alnaser, Alex Durante, and Kyle Cook
6. **Distributed Algorithm for Geographic Opportunistic Routing in VANETs at Road Intersection**, Debasis Das

DataCom Short Paper Session:

1. **Review on HDD-Based, SSD-Based and Hybrid Key-Value Stores**, Juan Li, Nong Xiao, Zhiguang Chen, and Fang Liu
2. **Application of Logistic Regression in Assessing Stock Performances**, Usha Ananthakumar and Ratul Sarkar
3. **DeepSim: Cluster Level Behavioral Simulation Model for Deep Learning**, Yuankun Shi, Kevin Long, Kaushik Balasubramanian, Bianny Bian, Adam Procter, and Ramesh Illikkal
4. **Intelligent Perioperative System: Towards Big Data Analytics in Surgery Risk Assessment**, Zheng Feng, Rajendra Bhat, Xiaoyong Yuan, Daniel Freeman, Tezcan Baslanti, Azra Bihorac, and Xiaolin Li
5. **Seed Node Distribution for Influence Maximization in Multiple Online Social Networks**, Soham Das
6. **Effective Mobile Notification Recommendation Using Social Nature of Locations**, Prasanta Saikia and James She
7. **Building a Semi-Supervised Dataset to Train Journalistic Relevance Detection Models**, Nuno Guimarães and Álvaro Figueira
8. **Developing Adaptive Islamic Law Business Processes Models for Islamic Finance and Banking by Text Mining the Holy Qur'an and Hadith**, Munir Majdalawieh, Farhi Marir, and Issam Tiemsani

DataCom Poster Paper Session:

1. **A Big Aurora Data Management Framework Toward Aurora Classification**, Yuhang Wang, Hui Zhao, Xian Zhang, and Jimin Liang
2. **Towards the Design of a System and a Workflow Model for Medical Big Data Processing in the Hybrid Cloud**, Yong-Hyun Kim and Eui-Nam Huh
3. **Mining the Statistical Information of Confidential Data from Noise-Multiplied Data**, Yan-Xia Lin
4. **Orientation in Conceptual Modeling Frameworks**, Sabah Al-Fedaghi and Haya Alahmad
5. **BLE Tree Networks for Sensor Devices in Internet of Things**, Sheng-De Wang and Kuan-Jung Chiang
6. **A Parallel Majority Learning Algorithm for Anomaly Detection**, Shin-Ying Huang, Ya-Yun Peng, and Fang Yu
7. **Automate of the Fact-checking: State of Art, Obstacles and Perspectives**, Edouard Ngor Sarr and Ousmane Sall
8. **Deep Convolutional Neural Network for Facial Expression Recognition using Facial Parts**, Lucy Nwosu, Jiang Lu, and Hui Wang