

Conference Schedule

The 2016 International
Conference on
Computational Science &
Computational Intelligence

CSCEI 2016

Las Vegas, Nevada, USA | Dec 15-17

Editors

Hamid R. Arabnia

Leonidas Deligiannidis, Mary Yang



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CSCI 2016 CONFERENCE SCHEDULE

The 2016 International Conference on Computational Science and Computational Intelligence

<http://www.americancse.org/events/csci2016>

December 15-17, 2016

Monte Carlo Resort, 3770 Las Vegas Blvd. South, Las Vegas, 89109, USA

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CSCI 2016 CONFERENCE SCHEDULE

The 2016 International Conference on Computational Science and Computational Intelligence

<http://www.americancse.org/events/csci2016>

December 15-17, 2016

Monte Carlo Resort, 3770 Las Vegas Blvd. South, Las Vegas, 89109, USA

December 14

05:00 - 08:00pm: REGISTRATION
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)

December 15

7:00am - 5:00pm: REGISTRATION
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)

08:30 - 09:00am: CSCI'16 OPENING REMARKS - December 15, 2016, Thursday:
CSCI 2016 Steering Committee representative,
Prof. Hamid R. Arabnia
Department of Computer Science, University of Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer);
Co-Editor/Board, Journal of Computational Science (Elsevier);
(LOCATION: East Ballroom 7 with Ballroom 8 for overflow)

09:00 - 10:00am: CONFERENCE KEYNOTE LECTURE - December 15, 2016, Thursday:
Gravitational Waves: the new frontier in science & technology
Dr. Erik Katsavounidis
Massachusetts Institute of Technology (MIT), Cambridge, USA
Member of the Laser Interferometer Gravitational wave
Observatory (LIGO - operated jointly by Caltech,
<https://www.caltech.edu/> and MIT <http://www.mit.edu/>)
(LOCATION: East Ballroom 7 with Ballroom 8 for overflow)

10:00 - 10:40am: POSTER/DISCUSSION SESSIONS A-CSCI
December 15, 2016 (Thursday)
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
Refreshments will be available.
List of poster papers appears at the end of December 15's schedule.

DECEMBER 15, 2016

THERE ARE FOUR SETS OF CONCURRENT SESSIONS FOR THE REST OF December 15, 2016;
SCHEDULED IN BALLROOM 6, BALLROOM 7, BALLROOM 8, & GOLD CONFERENCE ROOM.

-----> SESSIONS SCHEDULED IN BALLROOM 6 - DECEMBER 15 <-----

- SESSION 1A-ISHI: (CONCURRENT SESSION WITH SESSIONS 2A-ISBD, 3A-ISCS, & 4A-ISCI)**
SYMPOSIUM ON HEALTH INFORMATICS & MEDICAL SYSTEMS (CSCI-ISHI)
Co-Chairs: Prof. Eamon Doherty;
Director, Cybercrime Training Lab,
Fairleigh Dickinson University, New Jersey, USA
December 15, 2016 (Thursday); 10:40am - 12:00pm
(LOCATION: Ballroom 6)
- 10:40 - 11:00am: ROFI - The Use of Repeated Optimization for Feature Interpretation
Bobbie-Jo M. Webb-Robertson, Lisa M. Bramer, Sarah Reehl,
Thomas O. Metz, Marian J. Rewers, Brigitte I. Frohner, Qibin Zhang
Pacific Northwest National Laboratory, Richland, Washington, USA;
Barbara Davis Center for Diabetes, University of Colorado School
of Medicine, Aurora, Colorado, USA;
University of North Carolina, Greensboro, North Carolina, USA
- 11:00 - 11:20am: Initial Results in Alzheimer's Disease Progression Modeling
Using Imputed Health State Profiles
B. D. Fleet, J. R. Deller, Jr., E. D. Goodman
Department of Electrical and Computer Engineering, Michigan State
University, East Lansing, Michigan, USA;
BEACON, Center for the Study of Evolution in Action, Michigan
State University, East Lansing, Michigan, USA
- 11:20 - 11:40am: Digitizing the Hand Rehabilitation using the Serious Games
Methodology with a User-Centered Design Approach
Ahmed Elnaggar, Dirk Reichardt
Intelligent Interaction Lab, Computer Science Department,
DHBW Stuttgart, Stuttgart, Germany
- 11:40a - 12:00p: Monitoring Patient Activity During Chemotherapy with Wearable
Fitness Devices
Sandor Laki, Akos Rudas, Istvan Godor, Anna Horvath,
Zsuzsanna Kapitany, Istvan Csabai, Gabor Vattay, Peter Pollner
ELTE, Budapest, Hungary; Ericsson Research, Budapest, Hungary;
Semmelweis University, Budapest, Hungary; Statistical and
Biological Physics Research Group, HAS, Budapest, Hungary
- 12:00 - 01:00pm: LUNCH (On Your Own)
- SESSION 1B-ISPC: (CONCURRENT SESSION WITH SESSIONS 2B-ISOT, 3B-ISED, & 4B-ISAI)**
SYMPOSIUM ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION &
PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: Prof. John Kundert-Gibbs;
The University of Georgia, Athens, Georgia, USA
December 15, 2016 (Thursday); 01:00pm - 02:20pm
(LOCATION: Ballroom 6)
- 01:00 - 01:20pm: Classification of Image Distortions for Image Quality Assessment
Omar Alaql, Kambiz Ghazinour, Cheng Chang Lu
Department of Computer Science, Kent State University,
Kent, Ohio, USA

- 01:20 - 01:40pm: Preliminary Investigation of Walking Motion Using a Combination of Image and Signal Processing
Bradley Schneider, Tanvi Banerjee
Department of Computer Science and Engineering,
Wright State University, Fairborn, Ohio, USA
- 01:40 - 02:00pm: Quantifying the Anthropogenic Heat in Urban Areas Using Thermal Images
Amin Anjomshoaa, Fabio Duarte, Ricardo Alvarez, Rex Britter, and Carlo Ratti
SENSEable City Laboratory, Massachusetts Institute of Technology, MIT, Cambridge, Massachusetts, USA
- 02:00 - 02:20pm: A Diffusion Strategy for the Multichannel Active Noise Control System in Distributed Network
Ju-Man Song, PooGyeon Park
Pohang University of Science and Technology, Kyungbuk, Korea
- 02:20 - 02:40pm: **BREAK**
- SESSION 1C-ISPC: (CONCURRENT SESSION WITH SESSIONS 2C-ISMC, 3C-ISPD, & 4C-ISCI)
SYMPOSIUM ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: Prof. Hyo Jong Lee* and Moath Alsafasfeh**;
*Director, Center for Advanced Image and Information Technology, CSE, Chonbuk National University, Korea;
**Department of ECE, Western Michigan University, USA
December 15, 2016 (Thursday); 02:40pm - 04:00pm
(LOCATION: Ballroom 6)**
- 02:40 - 03:00pm: Assessing the Usability of LiDAR Processing Methods on UAV Data
Denis Horvat, Dean Kobale, Jan Zorec, Domen Mongus, Borut Zalik
University of Maribor, Slovenia;
GS Dean Kobale, s.p., Slovenia
- 03:00 - 03:20pm: An Image Analysis of Sky-localization Maps of Gravitational-wave Transients
Leonidas Deligiannidis
Wentworth Institute of Technology, Boston, MA, USA;
Visiting Scientist, MIT Kavli Institute for Astrophysics and Space Research, Massachusetts Institute of Technology, Cambridge, MA, USA
- 03:20 - 03:40pm: Retinex-based Enhancement System for Poor Visibility Inclinment Weather Images
Marwan S. Alluhaidan, Ikhlas Abdel-Qader
Department of Electrical and Computer Engineering,
Western Michigan University, Kalamazoo, Michigan, USA
- 03:40 - 04:00pm: Uniform vs Full Height Maps Using a Time of Flight Device for Dewarping Book Spread Images in the Design of an Automated Book Reader
Luis Galarza, Harold Martin, Malek Adjouadi
Center for Advanced Technology and Education, Department of Electrical and Computer Engineering, Florida International University, Miami, Florida, USA

-----> SESSIONS SCHEDULED IN BALLROOM 7 - DECEMBER 15 <-----

- 10:00 - 10:40am: POSTER/DISCUSSION SESSIONS A-CSCI**
 December 15, 2016 (Thursday)
 (LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
 Refreshments will be available.
 List of poster papers appears at the end of December 15's schedule.
- SESSION 2A-ISBD: (CONCURRENT SESSION WITH SESSIONS 1A-ISHI, 3A-ISCS, & 4A-ISCI)**
SYMPOSIUM ON BIG DATA & DATA SCIENCE (CSCI-ISBD)
 Co-Chairs: Dr. Dunling Li;
 Vice President of Research and Engineering,
 BTS Software Solutions, Columbia, Maryland, USA
 December 15, 2016 (Thursday); 10:40am - 12:00pm
 (LOCATION: Ballroom 7)
- 10:40 - 11:00am: A Cross-Sectional Comparison of Computing Education**
 Salvador Jesus Gutierrez Martinez, Delbert Hart
 Computer Science Department, SUNY Plattsburgh,
 Plattsburgh, New York, USA
- 11:00 - 11:20am: Contextual Search for Software Engineering**
 Sakir Yucel
 NetApp, USA
- 11:20 - 11:40am: Performance Comparison of State-of-Art Lossless Video
 Compression Methods**
 Dunling Li, Vy Bui, Lin-Ching Chang
 BTS Software Solutions, Columbia, Maryland, USA;
 Department of Electrical Engineering and Computer Science,
 The Catholic University of America, Washington, DC, USA
- 11:40a - 12:00p: Using DEA Models to Measure the Performance of Public
 Culture Services in China**
 Jianfeng Zhu, En Cheng, Wende Wang
 Hubei University of Economics, P. R. China;
 University of Akron, USA; Wuhan University, P. R. China
- 12:00 - 01:00pm: LUNCH (On Your Own)**
- SESSION 2B-ISOT: (CONCURRENT SESSION WITH SESSIONS 1B-ISPC, 3B-ISED, & 4B-ISAI)**
SYMPOSIUM ON INTERNET OF THINGS & INTERNET OF EVERYTHING (CSCI-ISOT)
 Co-Chairs: Ms. Neo Motlhabane* and Dr. En Cheng**
 *North-West University, MaSIM Research Focus, South Africa
 **The University of Akron, Ohio, USA
 December 15, 2016 (Thursday); 01:00pm - 02:20pm
 (LOCATION: Ballroom 7)
- 01:00 - 01:20pm: Raspberry Pi 2 B+ GPU Power, Performance, and Energy Implications**
 Qihao He, Bruce Segee, Vincent Weaver
 University of Maine, Orono, Maine, USA
- 01:20 - 01:40pm: SimML Framework: Monte Carlo Simulation of Statistical Machine
 Learning Algorithms for IoT Prognostic Applications**
 Ashwini R. More, Kenny C. Gross
 Oracle Physical Sciences Research Center, Oracle Corporation,
 San Diego, California, USA
- 01:40 - 02:00pm: Improving the Accuracy of Bluetooth Low Energy Indoor Positioning
 System Using Kalman Filtering**
 Adrian Ozer, Eugene John
 The University of Texas at San Antonio, Texas, USA

02:00 - 02:20pm: Elaborate Synthetic Data Generation for Internet of Things Services at Smart Home Environment
 Rohyoung Myung, Sungmin Choi, Woosung Choi, Heonchang Yu, Daewon Lee, Eunyoung Lee
 Korea University, Korea; Dongduk Women's University, Korea; Seokyeong University, Korea

02:20 - 02:40pm: BREAK

SESSION 2C-ISMC: (CONCURRENT SESSION WITH SESSIONS 1C-ISPC, 3C-ISPD, & 4C-ISCI)
 SYMPOSIUM ON MOBILE COMPUTING, WIRELESS NETWORKS, AND SECURITY (CSCI-ISMC)

Co-Chairs: Dr. Dr. Macam S. Dattathreya* and Prof. Mankoothathil Paulose Sebastian**;
 *US Department of Army (DoA), USA;
 **Indian Institute of Management Kozhikode, India
 December 15, 2016 (Thursday); 02:40pm - 04:00pm
 (LOCATION: Ballroom 7)

02:40 - 03:00pm: Lessons on Teaching Malware Investigations Online
 Eamon P. Doherty, Michael Divito
 Fairleigh Dickinson University, Cybercrime Training Lab, New Jersey, USA

03:00 - 03:20pm: Covert Channel Using Man-In-The-Middle over HTTPS
 Matthew Johnson, Peter Lutz, Daryl Johnson
 Rochester Institute of Technology, Rochester, New York, USA

03:20 - 03:40pm: Improved OFDM Decoder for LTE and Beyond
 Natasa S. Zivic, Obaid Ur-Rehman
 Chair for Data Communications Systems, University of Siegen, Siegen, Germany

03:40 - 04:00pm: FREE SLOT

-----> SESSIONS SCHEDULED IN BALLROOM 8 - DECEMBER 15 <-----

10:00 - 10:40am: POSTER/DISCUSSION SESSIONS A-CSCI
 December 15, 2016 (Thursday)
 (LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
 Refreshments will be available.
 List of poster papers appears at the end of December 15's schedule.

SESSION 3A-ISCS: (CONCURRENT SESSION WITH SESSIONS 1A-ISHI, 2A-ISBD, & 4A-ISCI)
 SYMPOSIUM ON COMPUTATIONAL SCIENCE (CSCI-ISCS)

Co-Chairs: TBA
 December 15, 2016 (Thursday); 10:40am - 12:00pm
 (LOCATION: Ballroom 8)

10:40 - 11:00am: Visualization Techniques for Effective Software Comprehend
 Eiman Aldahari
 University of Memphis, Tennessee, USA

11:00 - 11:20am: An Integrated Quay Crane Assignment and Scheduling Problem Using Branch-and-price
 Mohamed Kais Msakni, Mohammed Al-Salem, Ali Diabat, Ghaith Rabadi, Mariam Kotachi
 Qatar University, Qatar; Masdar Institute of Science and Technology, Abu Dhabi, UAE;
 Old Dominion University, Norfolk, Virginia, USA

- 11:20 - 11:40am: Asynchronous Hybrid Parallel SpMV in an Industrial Application
Christopher Thiele, Mauricio Araya-Polo, Dimitar Stoyanov,
Florian Frank, Faruk O. Alpak
Fraunhofer ITWM; Shell Intl. E&P Inc.;
Rice University, Texas, USA
- 11:40a - 12:00p: Closest History Flow Field Forecasting
Kyle A. Caudle, Patrick S. Fleming
South Dakota School of Mines and Technology, Rapid City,
South Dakota, USA
- 12:00 - 01:00pm: LUNCH (On Your Own)
- SESSION 3B-ISED: (CONCURRENT SESSION WITH SESSIONS 1B-ISPC, 2B-ISOT, & 4B-ISAI)
SYMPOSIUM ON EDUCATION (CSCI-ISED)
Co-Chairs: Dr. Marek Nowicki;
Nicolau Copernicus University in Torun, Poland
December 15, 2016 (Thursday); 01:00pm - 02:20pm
(LOCATION: Ballroom 8)**
- 01:00 - 01:20pm: Control of Educational Processes Using SPSA
Nikolai Granichin, Olga Granichina, Anton Proskurnikov,
and Sergey Trapitsin
Saint Petersburg State University, Russia; Institute of
Problems of Mechanical Engineering (IPME RAS), Russia;
Delft University of Technology, The Netherlands;
Herzen State Pedagogical University, Russia
- 01:20 - 01:40pm: Scaling Data Warehousing Course Projects
Karen C. Davis, Dippy Aggarwal, Susan Baskin
University of Cincinnati, Cincinnati, Ohio, USA;
Teradata University Network, Teradata Corporation,
Atlanta, Georgia, USA
- 01:40 - 02:00pm: Gamification to Engage and Motivate Students to Achieve
Computer Science Learning Goals
Shannon Butler, Dewan Tanvir Ahmed
Department of Computer Science, University of North Carolina
at Charlotte, North Carolina, USA
- 02:00 - 02:20pm: Practical Approaches for Introducing ECE and CS to High
School Students
Girma S. Tewolde
Electrical and Computer Engineering Department,
Kettering University, Flint, Michigan, USA
- 02:20 - 02:40pm: BREAK
- SESSION 3C-ISPD: (CONCURRENT SESSION WITH SESSIONS 1C-ISPC, 2C-ISMC, & 4C-ISCI)
SYMPOSIUM ON PARALLEL & DISTRIBUTED COMPUTING & COMPUTATIONAL
SCIENCE (CSCI-ISPD)
Co-Chairs: Dr. Abdel-Hameed Badawy;
School of Electrical and Computer Engineering,
New Mexico State University, New Mexico, USA
December 15, 2016 (Thursday); 02:40pm - 04:00pm
(LOCATION: Ballroom 8)**
- 02:40 - 03:00pm: Estimating The Cost Of Digital Service Delivery Over Clouds
Sakir Yucel
NetApp, USA

- 03:00 - 03:20pm: Cache Utilization as a Locality Metric: A Case Study on the Mantevo Suite
 Nafiul Alam Siddique, Patricia Grubel, Abdel-Hameed A. Badawy, and Jeanine Cook
 Klipsch School of Electrical and Computer Engineering, New Mexico State University, USA;
 Sandia National Labs, Albuquerque, New Mexico, USA
- 03:20 - 03:40pm: GPU-ready GASNet Implementation on the TCA Proprietary Interconnect Architecture
 Kenta Sato, Norihisa Fujita, Toshihiro Hanawa, Taisuke Boku, and Khaled Z. Ibrahim
 University of Tsukuba, Japan; The University of Tokyo, Japan; Lawrence Berkeley National Laboratory, USA
- 03:40 - 04:00pm: Hiding Parallel MPI Programming Behind Graphical Workflow Specifications
 Jose-Luis Quiroz Fabian, G. Roman-Alonso, M. A. Castro-Garcia, and M. Aguilar-Cornejo
 Universidad Autonoma Metropolitana, Mexico City, Mexico

-----> SESSIONS SCHEDULED IN GOLD CONFERENCE ROOM - DECEMBER 15 <-----

- 10:00 - 10:40am: POSTER/DISCUSSION SESSIONS A-CSCI
 December 15, 2016 (Thursday)
 (LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
 Refreshments will be available.
 List of poster papers appears at the end of December 15's schedule.
- SESSION 4A-ISCI: (CONCURRENT SESSION WITH SESSIONS 1A-ISHI, 2A-ISBD, & 3A-ISCS)
 SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE (CSCI-ISCI)
 Co-Chairs: Prof. Thomas Baeck* and Haotian Jiang**;
 *Leiden Institute of Advanced Computer Science,
 Leiden University, Netherlands;
 **SAIL Lab., EECS Department,
 Case Western Reserve University, Cleveland, Ohio, USA
 December 15, 2016 (Thursday); 10:40am - 12:00pm
 (LOCATION: GOLD Conference Room)
- 10:40 - 11:00am: Co-Ranking Authors in Heterogeneous News Networks
 Lenin Mookiah, William Eberle
 Department of Computer Science, Tennessee Technological University, Cookeville, Tennessee, USA
- 11:00 - 11:20am: Machine Learning Algorithms for Natural Language Semantics and Cognitive Computing
 Emdad Khan
 Department of Computer Science, Maharishi University, Iowa, USA;
 InternetSpeech, Inc., San Jose, California, USA
- 11:20 - 11:40am: Hooked On Springs: Using Virtualized Damped Harmonic Oscillators to Explore Complex Search Spaces
 John Kundert-Gibbs, W. D. Potter
 The Institute for Artificial Intelligence,
 The University of Georgia, USA

- 11:40a - 12:00p: Deep Learning Network Models to Categorize Texts According to Author's Gender and to Identify Text Sentiment
Aleksandr Sboev, Irina Voronina, Tatiana Litvinova,
Dmitry Gudovskikh, Roman Rybka
NRC Kurchatov Institute, MEPhI National Research Nuclear University, Plekhanov Russian University of Economics, Russia;
Voronezh State Pedagogical University, Voronezh State University, Russia; NRC Kurchatov Institute, Russia
- 12:00 - 01:00pm: LUNCH (On Your Own)
- SESSION 4B-ISAI: (CONCURRENT SESSION WITH SESSIONS 1B-ISPC, 2B-ISOT, & 3B-ISED)
SYMPOSIUM ON ARTIFICIAL INTELLIGENCE (CSCI-ISAI)**
Co-Chairs: Dr. Emdad Khan;
Maharishi University, Fairfield, Iowa, USA and
InternetSpeech, Inc., San Jose, California, USA
December 15, 2016 (Thursday); 01:00pm - 02:20pm
(LOCATION: GOLD Conference Room)
- 01:00 - 01:20pm: FREE SLOT
- 01:20 - 01:40pm: A Language, Framework, and SDK for Robotic Communications, Integration, and Interoperability
Jeffrey Wallace, Sara Kambouris
Infinite Dimensions, West Plains, Missouri, USA
- 01:40 - 02:00pm: NuiVend - Next Generation Vending Machine
Robert Gruen, Erich Liang
Microsoft Research, Redmond, Washington, USA
- 02:00 - 02:20pm: Automatic Classification of Source Code Archives by Programming Language - A Deep Learning Approach
Julio Reyes, Diego Ramirez, Julio Paciello
Facultad Politecnica, Universidad Nacional de Asuncion,
San Lorenzo, Paraguay
- 02:20 - 03:00pm: BREAK
(Since the refreshments are setup in EAST Foyer, where the conference registration desks are located, the BREAK time for the group participating in sessions scheduled in GOLD Conference Room is extended to 40 minutes. It takes about 5 minutes to walk to EAST Foyer.)
- SESSION 4C-ISCI: (CONCURRENT SESSION WITH SESSIONS 1C-ISPC, 2C-ISMC, & 3C-ISPD)
SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE (CSCI-ISCI)**
Co-Chairs: Prof. Jaime Raigoza* and Prof. Shaligram Pokhare1**;
*California State University, Chico, California, USA
**Qatar University, Doha, Qatar
December 15, 2016 (Thursday); 03:00pm - 06:00pm
(LOCATION: GOLD Conference Room)
- 03:00 - 03:20pm: Airborne RF Based Target Searching and Localization with microUVA
Ju Wang, Cesar Flores Montoya, C. L. Liu
Virginia State University, USA;
University of Florida, USA
- 03:20 - 03:40pm: Novel Application of MapReduce and Conceptual Graphs
Sirisha Velampalli, William Eberle
Jawaharlal Nehru Technological University, Kakinada, AP India;
Tennessee Technological University, Cookeville, Tennessee, USA

- 03:40 - 04:00pm: Artificial Intelligent Models for New Product Design: An Application Study
Yang-Cheng Lin
National Taipei University of Business, Taoyuan, Taiwan
- 04:00 - 04:20pm: Integrated Optimization for Stock Levels and Cross-Training Schemes with Simulation-Based Genetic Algorithm
Hasan Huseyin Turan, Shaligram Pokharel, Andrei Sleptchenko, and Tarek Y ElMekkawy
Department of Mechanical and Industrial Engineering, Qatar University, Doha, Qatar
- 04:20 - 04:40pm: A Parallel Bi-Perceptron Approach and its Application to Data Classification
Daw-Ran Liou, Yang-En Chen, Cheng-Yuan Liou
Department of Computer Science and Information Engineering, National Taiwan University, Taipei, Taiwan
- 04:40 - 05:00pm: A Tourist Tour Node Model and Tour Support
Shang Gao, Junyu Niu, Dawei Sun
School of Information Technology, Deakin University, Geelong, Australia; School of Information Engineering, China University of Geosciences, Beijing, P. R. China
- 05:00 - 05:20pm: Mining Latent Features from Reviews and Ratings for Item Recommendation
Chenyu Zhai, Jing Peng
Wittenberg University, Springfield, Ohio, USA;
Hebei University of Science and Technology, P. R. China
- 05:20 - 05:40pm: Text Document Clustering: The Application of Cluster Analysis to Textual Document
Venkata S. Reddy, Patrick Kinnicutt, Roger Y. Lee
Department of Computer Science, Central Michigan University, Mount Pleasant, Michigan, USA
- 05:40 - 06:00pm: Realtime Fraud Detection in the Banking Sector using Data Mining Techniques Algorithm
S. N. John, C. Anele, K.O. Okokpujie, F. Olajide, and Chinyere Grace Kennedy
Covenant University, Ota, Ogun State, Nigeria; National Open University of Nigeria, Victoria Island Lagos, Nigeria; Ewha Womans University, Seoul, South Korea

LIST OF PAPERS IN POSTER/DISCUSSION SESSIONS A-CSCI

10:00 - 10:40am; December 15, 2016 (Thursday)
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
Refreshments will be available.

0. Socio-Demographic Factors and Data Science Methodologies in Type 2 Diabetes Mellitus Analysis
Neil Hernandez-Gress, Diana Canales
Tecnologico de Monterrey, Mexico
0. Risks in Handling Healthcare Data and a New Ethical Approach for Healthcare Organizations
Jagannathan Govindan
Canoga Park, California, USA
0. The Specification of New Technology to Support Assisted Living (AL) from a Biopsychosocial, Stakeholder Relationship Perspective and Ethics Perspective
Joan Cahill, Sean Mcloughlin, Sean Wetherall
School of Psychology, Trinity College, Dublin, Ireland;
Oneview Healthcare, Blackrock Business Park, Co., Dublin, Ireland

0. Adaptive Aggregation of Redundant Sensor Data in the Internet of Things
Stephan Schmeisser, Gregor Schiele
University Duisburg-Essen, Duisburg, Germany
0. A Hierarchically Switching Analysis Architecture with Streaming Data from IoT Sensors
Dong-Oh Kang, Jiyong Kim, Jang-Ho Choi, Hwin Dol Park, Ok-Gee Min
Data Analysis Software Research Section, Electronics and Telecommunications Research Institute, Daejeon, Korea
0. Using Build and Runtime Information for Student Adaptive Support
Erik Kral, Petr Capek
Tomas Bata University in Zlin, Czech Republic
0. Spectrogram Based Toolkit for High Density Visualization of Data
Solvita Zarina, Ojars Krasts
University of Latvia, Riga, Latvia;
Exigen Services Latvia, Riga, Latvia
0. Max Margin Polyhedral Conic Function Classifier
Gurhan Ceylan, Gurkan Ozturk
Industrial Engineering, Anadolu University, Turkey
0. Review of the Principal Indicators and Data Science Techniques used for the Detection of Financial Fraud and Money Laundering
Bronson Duhart, Neil Hernandez-Gress
Tecnologico de Monterrey, Mexico
0. Publishing Student Grades While Preserving Individual Information using Bayesian Networks
Jaime Raigoza, Diney Wankhede
California State University, Chico, California, USA
0. Research the Data Analysis and Processing Between MapReduce and Spark
Jaime Raigoza, Vijay Singh Parmar
California State University Chico, Chico, California, USA
0. On the Use of Match Filtering for the P300 Detection
Victor Lafuente, J. M. Gorriz, J. Ramirez, F. J. Martinez Murcia, D. Salas, F. Segovia
University of Granada, Granada, Spain
0. ...

DECEMBER 16, 2016

THERE ARE FOUR SETS OF CONCURRENT SESSIONS ON December 16, 2016;
SCHEDULED IN BALLROOM 6, BALLROOM 7, BALLROOM 8, & GOLD CONFERENCE ROOM.

-----> SESSIONS SCHEDULED IN BALLROOM 6 - DECEMBER 16 <-----

SESSION 1D-ISHI: (CONCURRENT SESSION WITH SESSIONS 2D-ISBD, 3D-ISCS, & 4D-ISAI-ISCI)
SYMPOSIUM ON HEALTH INFORMATICS & MEDICAL SYSTEMS (CSCI-ISHI)
Co-Chairs: Dr. Mahmudur Rahman;
Morgan State University, Baltimore, Maryland, USA
December 16, 2016 (Friday); 08:20am - 10:00am
(LOCATION: Ballroom 6)

08:20 - 08:40am: On Ontology-Based Diagnosis and Defeasibility
Nadim Obeid, Enas Rawashdeh, Eman Alduweib, Asma Moubaidin
The University of Jordan, Amman, Jordan

08:40 - 09:00am: Integrating Dental Working Experience in Development of a Dental
Clinic Database System for a General Tertiary Hospital
Deena M. Barakah
Dental Clinic Department, King Saud Medical Cit, Ministry of
Health, Riyadh, Saudi Arabia

09:00 - 09:20am: Registration Guided Simulation of Prostate Movement for
Radiation Therapy
Yifan Shen, Nirvik A. Das, Yue Zhang, Wolfram Laub
Oregon State University, USA;
Oregon Health and Science University, USA

09:20 - 09:40am: Lung Nodule Detection and Segmentation Using a Patch-Based
Multi-Atlas Method
Mustafa Alam, Ganesh Sankaranarayanan, Venkat Devarajan
University of Texas at Arlington, Arlington, Texas, USA;
Baylor University Medical Center, Dallas, Texas, USA

09:40 - 10:00am: Health IT Maturity and Hospital Quality: Effects of PACS
Automation and Integration Levels on U.S. Hospital Performance
Benjamin Schooley, Neset Hikmet, Emrah Atilgan
Health Information Technology, University of South Carolina,
Columbia, South Carolina, USA; Integrated Information
Technology, University of South Carolina, South Carolina, USA

10:00 - 10:20am: **BREAK**

SESSION 1E-ISHI: (CONCURRENT SESSION WITH SESSIONS 2E-ISOT, 3E-ISED, & 4D-ISAI-ISCI)
SYMPOSIUM ON HEALTH INFORMATICS & MEDICAL SYSTEMS (CSCI-ISHI)
Co-Chairs: Dr. Chunming Gao* and Dr. Dallas H. Snider**
*Institute of Technology, University of Washington,
Tacoma, Washington, USA;
**Computer Science, University of West Florida,
Pensacola, Florida, USA
December 16, 2016 (Friday); 10:20am - 12:40pm
(LOCATION: Ballroom 6)

10:20 - 10:40am: Knowledge Discovery Processes Implemented in Evaluating
Wearable Sensors in High Performance Jet Aircraft
Dallas H. Snider, G. Merrill Rice, Thomas B. VanBrunt, and
Robert E. Hoyt
University of West Florida, Pensacola, Florida, USA;
U.S. Naval Aerospace Medical Institute, Pensacola, Florida, USA

- 10:40 - 11:00am: Developing a Prototype for Evaluations of Healthcare Appointment and Registration Smart Assistant
Chunming Gao, Noriyuki Iwane
Institute of Technology, University of Washington Tacoma, Washington, USA; Faculty of Information Sciences, Hiroshima City University, Hiroshima, Japan
- 11:00 - 11:20am: Designing Privacy Information Protection of Electronic Medical Records
Tzu-Wei Tseng, Cheng-Yi Yang, Chien-Tsai Liu
Graduate Institute of Biomedical Informatics, College of Medical Science and Technology, Taipei Medical University, Taiwan
- 11:20 - 11:40am: A Case-based Skin Cancer Detector for Android Phones based on Depict Concept: CBMelanom
Sara Nasiri, Bedrettin Aslan, Simon Geller, Madjid Fathi
Department of Electronic and Computer Science, Institute of Knowledge based System and Knowledge Management, Siegen University, Siegen, Germany
- 11:40a - 12:00p: Biomedical Image Classification with Multi Response Linear Regression (MLR) as Meta-Learner Combiner and its Effectiveness on Small to Large Data Sets
Mahmudur Rahman, Prabir Bhattacharya
Morgan State University, Baltimore, Maryland, USA
- 12:00 - 12:20pm: Health Bio Info Technomics: Strategy for Clinical Practice at the Point of Care
Giuseppe Tritto, Andrew Marsh, Denis Carroll, Alice Karoubi Nordon, Matthew Tritto
WABT - World Academy of Biomedical Sciences and Technologies, UNESCO NGOs House, Paris, France, EU; HoIP, London, UK; NHS Health Education England, Strategic Procurement Manager, London, UK; Ascott Associates, Partner, International Lawyer, Paris, France, EU; WWO-NGTP, WABT Academy, Paris, France, EU
- 12:20 - 12:40pm: FREE SLOT
- 12:40 - 01:20pm: LUNCH (On Your Own)
- SESSION 1F-ISPC: (CONCURRENT SESSION WITH SESSIONS 2F-ISMC & 3F-ISPD)
SYMPOSIUM ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: Dr. Macam S. Dattathreya* & Prof. Jaime Raigoza**;
*US Department of Army (DoA), USA;
**California State University, Chico, California, USA
December 16, 2016 (Friday); 01:20pm - 03:00pm
(LOCATION: Ballroom 6)**
- 01:20 - 01:40pm: Automatic Detection of Characteristic Viscosity Points in Mineralogical Samples
Irving Cruz-Matias
Departamento de Ciencias Computacionales, Universidad de Monterrey, Mexico
- 01:40 - 02:00pm: Methodology for Band Selection of Hyperspectral Images using Genetic Algorithms and Gaussian Maximum Likelihood Classifier
Diego Saqui, Jose H. Saito, Lucio A. de C. Jorge, Ednaldo J. Ferreira, Daniel C. Lima, Joao P. Herrera
UFSCAR - Federal University of Sao Carlos, Brazil; Faculty Campo Limpo Paulista - FACCAMP, Brazil; Embrapa Instrumentation, Sao Carlos, Brazil

- 02:00 - 02:20pm: Vision Based Object Counting using Speeded Up Robust Features for Inventory Control
Nishchal K. Verma, Teena Sharma, Rahul K. Sevakula, Al Salour
Indian Institute of Technology Kanpur, India;
The Boeing Company, St. Louis, MO, USA
- 02:20 - 02:40pm: Methodology for Iris Scanning Through Smartphones
Jose de Jesus Rosales-Banderas, Maximo Lopez-Sanchez,
Raul Pinto-Elias, Gabriel Gonzalez-Serna
National Center for Research and Technological Development,
CENIDET, Mexico
- 02:40 - 03:00pm: FREE SLOT
- 03:00 - 03:40pm: **POSTER/DISCUSSION SESSIONS B-CSCI**
December 16, 2016 (Friday)
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
Refreshments will be available.
List of poster papers appears at the end of December 16's schedule.
- SESSION 1G-ISPC: (CONCURRENT SESSION WITH SESSIONS 2G-ISMC & 3G-ISCS)**
SYMPOSIUM ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION & PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: Prof. Hiroshi Dozono;
Graduate School of Science and Engineering,
Saga University, Japan
December 16, 2016 (Friday); 03:40pm - 06:00pm
(LOCATION: Ballroom 6)
- 03:40 - 04:00pm: A Two-level Apriltag based Target Tracking System with microUVA
Ju Wang, Jonathan C. L. Liu, Chad Sadler, Cesar Flores Montoya
Virginia State University, USA;
University of Florida, USA
- 04:00 - 04:20pm: Defocus Map Detection Using a Single Image
Juan Andrade
School of Electrical, Computer and Energy Engineering,
Arizona State University, Tempe, Arizona, USA
- 04:20 - 04:40pm: Fusion Based Emotion Recognition System
Anupam Agrawal, Nayaneesh Kumar Mishra
Interactive Technologies and Multimedia Research Lab,
Indian Institute of Information Technology Allahabad, India
- 04:40 - 05:00pm: Image Analysis of Fundus using Filter Bank and Subspace Classifier
Nobuo Matsuda, Hideaki Sato, Fumiaki Tajima
National Institute of Technology, Toyota College, Japan;
Sato Hideaki Internist Clinic, Japan;
Yokohama National University, Japan
- 05:00 - 05:20pm: Geostatistical Data Fusion: Application to red edge bands of sentinel 2
Maria Joao Pereira, Alzira Ramos, Ruben Nunes,
Leonardo Azevedo, Amilcar Soares
CERENA/DECivil, Instituto Superior Tecnico,
University of Lisboa, Portugal

- 05:20 - 05:40pm: Convolutional Self Organizing Map
Hiroshi Dozono
Department of Advanced Fusion Technology, Graduate School
of Science and Engineering Saga University, Japan
- 05:40 - 06:00pm: Audio-Visual Video Classification System Design for Arabic
News Domain
Amal Dandashi, Jihad AlJaam, Sebti Fofou
Department of Computer Science and Engineering,
Qatar University, Doha, Qatar
- 08:00p - 10:00p: **CONFERENCE RECEPTION DINNER / SOCIAL**
December 16, 2016 (Friday); 08:00 - 10:00pm
(LOCATION: BALLROOMS 6, 7, AND 8)

-----> SESSIONS SCHEDULED IN BALLROOM 7 - DECEMBER 16 <-----

- SESSION 2D-ISBD: (CONCURRENT SESSION WITH SESSIONS 1D-ISHI, 1E-ISHI, 3D-ISCS,
3E-ISED, & 4D-ISAI-ISCI)**
SYMPOSIUM ON BIG DATA AND DATA SCIENCE (CSCI-ISBD)
Co-Chairs: Dr. Amin Anjomshoaa* and Dr. Kyle A. Caudle**;
*Massachusetts Institute of Technology,
MIT Senseable City Lab, Cambridge, Massachusetts, USA;
**South Dakota School of Mines and Technology,
Rapid City, South Dakota, USA
December 16, 2016 (Friday); 08:20am - 11:00am
(LOCATION: Ballroom 7)
- 08:40 - 09:00am: An Ontology-Based Framework to Model User Interests
Majid Darabi, Nasseh Tabrizi
Department of Computer Science, East Carolina University,
Greenville, North Carolina, USA
- 09:00 - 09:20am: A Case Study on Web-based Analytic Workflow in Big Data Platform
Minh Chau Nguyen, Hee Sun Won
Big Data Software Research Department, Electronics and
Telecommunications Research Institute (ETRI), Daejeon, Korea
- 09:20 - 09:40am: A Survey on Real-time Big Data Analytics: Applications and Tools
Babak Yadranjiaghdam, Nathan Pool, Nasseh Tabrizi
East Carolina University, Greenville, North Carolina, USA
- 09:40 - 10:00am: Towards Data Driven Process Control in Manufacturing Car
Body Parts
Bas Van Stein, Matthijs Van Leeuwen, Hao Wang, Stephan Purr,
Sebastian Kreissl, Josef Meinhardt, Thomas Baeck
LIACS, Leiden University, Leiden, The Netherlands;
BMW Plant Regensburg, Regensburg, Germany
- 10:00 - 10:20am: BREAK**
- 10:20 - 10:40am: Assuring Data Quality by Placing the User in the Loop
Nadia El Bekri, Elisabeth Peinsipp-Byma
Fraunhofer Institute of Optronics, System Technologies and
Image Exploitation IOSB, Karlsruhe, Germany
- 10:40 - 11:00am: Comparative Study of a DNA Sequence Storage Technique
Crystal Cobb, Soo-Yeon Ji
Bowie State University, Bowie, Maryland, USA

- SESSION 2E-ISOT: (CONCURRENT SESSION WITH SESSIONS 1E-ISHI, 3E-ISED, & 4D-ISAI-ISCI)
SYMPOSIUM ON INTERNET OF THINGS & INTERNET OF EVERYTHING
(CSCI-ISOT)**
Co-Chairs: Dr. Amitabh Mishra* & Prof. Dr. M. I. Khan Babar**;
*University of West Florida, Pensacola, Florida, USA
**UET Peshawar, Pakistan
December 16, 2016 (Friday); 11:00am - 12:20pm
(LOCATION: Ballroom 7)
- 11:00 - 11:20am: CaRDIN: An Agile Environment for Edge Computing on Reconfigurable Sensor Networks
Xuan Sang Le, Jean-Christophe Le Lann, Loic Lagadec, Luc Fabresse, Noury Bouraqadi, Jannik Laval
Lab-STICC, ENSTA Bretagne, France; Mines Douai-DIA, University Lille, France;
DISP, University Lumiere Lyon 2, France
- 11:20 - 11:40am: On Personalization In IoT
Thibaut Vallee, Karima Sedki, Sylvie Despres, M-Christine Jaulant, Karim Tabia, Adrien Ugon
LIMICS, University Paris 13, Paris, France;
UPMC University Paris 6, Sorbonne Universits, Paris, France;
Artois University, France
- 11:40a - 12:00p: Security and Privacy Challenges in IoT-based Health Cloud
Sultan Alasmari, Mohd Anwar
Department of Computer Science, North Carolina A&T State University, Greensboro, North Carolina, USA
- 12:00 - 12:20pm: IoT Technologies to Enhance Precision and Response Time of Mobile-based Educational Assessments
Salsabeel Shapsough, Mahitab Hassan, Shams Eddeen Shapsough, and Imran A. Zualkernan
Department of Computer Science and Engineering, American University of Sharjah, Sharjah, UAE
- 12:20 - 01:00pm: LUNCH (On Your Own)
- SESSION 2F-ISMC: (CONCURRENT SESSION WITH SESSIONS 1F-ISPC & 3F-ISPD)
SYMPOSIUM ON MOBILE COMPUTING, WIRELESS NETWORKS, AND SECURITY (CSCI-ISMC)**
Co-Chairs: Dr. Emrah Atilgan* & Prof. Dr. M. I. Khan Babar**
*University of South Carolina, USA;
**UET Peshawar, Pakistan
December 16, 2016 (Friday); 01:00pm - 03:00pm
(LOCATION: Ballroom 7)
- 01:00 - 01:20pm: A Statistical Approach to Estimating Driving Events by a Smartphone
Yazan A. Alqudah, Belal H. Sababha
Western Carolina University, Cullowhee, North Carolina, USA;
King Abdullah II Faculty of Engineering, Princess Sumaya University for Technology, Amman, Jordan
- 01:20 - 01:40pm: CyberProtector: Identifying Compromised URLs in Electronic Mails with Bayesian Classification
Nureni Ayofe Azeez, Ademolu Oluwatosin
Department of Computer Sciences, University of Lagos, Nigeria
- 01:40 - 02:00pm: Preventing Covert Webcam Hacking in the Civilian and Governmental Sectors
A. Sydney Jones, Kanwalinderjit Gagneja
Department of Computer Science and Information Technology, Florida Polytechnic University, Florida, USA;
Southern Oregon University, Ashland, Oregon, USA

- 02:00 - 02:20pm: Automatic Floor Plan Analysis for Adaptive Indoor Wi-Fi Positioning System
Xuning Zhang, Albert Kai-Sun Wong, Chin-Tau Lea
Hong Kong University of Science and Technology, Hong Kong
- 02:20 - 02:40pm: Quality of Service of Video Streaming in Vehicular Ad hoc Networks: performance analysis
Thulanai Phakathi, Francis Lugayizi, Bassey Isong, and Naison Gasela
North-West University, Mafikeng, South Africa
- 02:40 - 03:00pm: A Comparative Performance Analysis of MANETs Routing Protocols in Trust-based Models
Raihana Ferdous, Vallipuram Muthukkumarasamy
Griffith University, Queensland, Australia
- 03:00 - 03:40pm: **POSTER/DISCUSSION SESSIONS B-CSCI**
December 16, 2016 (Friday)
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
Refreshments will be available.
List of poster papers appears at the end of December 16's schedule.
- SESSION 2G-ISMC: (CONCURRENT SESSION WITH SESSIONS 1G-ISPC & 3G-ISCS)**
SYMPOSIUM ON MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY
(CSCI-ISMC)
Co-Chairs: Prof. Natarajan Meghanathan;
Department of Computer Science,
Jackson State University, Jackson, MS, USA
December 16, 2016 (Friday); 03:40pm - 06:00pm
(LOCATION: Ballroom 7)
- 03:40 - 04:00pm: On Synthesising Technical Cybersecurity Requirements for Automotive Embedded Systems
Macam S. Dattathreya, James E. Bechtel, Dariusz Mikulski
US Department of Army (DoA), USA
- 04:00 - 04:20pm: Extended Intra-Route Collision Avoidance Method with Variable Transmission Power Based on SIR Collision Model
Naoya Numata, Hiroaki Higaki
Department of Robotics and Mechatronics,
Tokyo Denki University, Japan
- 04:20 - 04:40pm: An Empirical Evaluation of the Effects of IoT Messaging Protocols
Matthew Furlong, Sekou L. Remy, Jerome McClendon
School of Computing, Clemson University, South Carolina, USA
- 04:40 - 05:00pm: Intelligence Partitioning as a Method for Architectural Exploration of Wireless Sensor Node
Qaiser Anwar, Muhammad Imran, Mattias O'Nils
Department of Electronics Design, Mid Sweden University,
Holmgatan, Sweden
- 05:00 - 05:20pm: Algebraic Connectivity-based Stable Data Gathering Trees for Mobile Sensor Networks
Natarajan Meghanathan
Department of Computer Science, Jackson State University,
Jackson, MS, USA

05:20 - 05:40pm: A Joint Frequency Band and Channel Adaptation Algorithm for Wi-Fi based Single-hop MANETs
Osama M. F. Abu-Sharkh
Princess Sumaya University for Technology, Amman, Jordan

05:40 - 06:00pm: Evaluation of Unlicensed LTE Solutions using ns-3
Pedro Maia de Santana, Vincius Dantas de Lima Melo, and Vicente A. de Sousa Jr.
Department of Communication Engineering,
Federal University of Rio Grande do Norte, Brazil

08:00p - 10:00p: **CONFERENCE RECEPTION DINNER / SOCIAL**
December 16, 2016 (Friday); 08:00 - 10:00pm
(LOCATION: BALLROOMS 6, 7, AND 8)

-----> SESSIONS SCHEDULED IN BALLROOM 8 - DECEMBER 16 <-----

SESSION 3D-ISCS: (CONCURRENT SESSION WITH SESSIONS 1D-ISHI, 2D-ISBD, & 4D-ISAI-ISCI)
SYMPOSIUM ON COMPUTATIONAL SCIENCE (CSCI-ISCS)
Co-Chairs: Prof. Anupam Agrawal;
Indian Institute of Information Technology
Allahabad (IIIT-A), Allahabad, India
December 16, 2016 (Friday); 08:20am - 10:00am
(LOCATION: Ballroom 8)

08:20 - 08:40am: Modelling Salient Object-Object Interactions to Generate Textual Descriptions for Natural Images
Hossein Adeli, Babak Yadrnjiaghdam, Nathan Pool, and Nasseh Tabrizi
Department of Computer Science, East Carolina University,
Greenville, North Carolina, USA

08:40 - 09:00am: Genetic Programming in Geostatistical Reservoir Geophysics
Leonardo Azevedo, Ruben Nunes, Amilcar Soares
Petroleum Group, CERENA/DECivil, Instituto Superior Tecnico,
U. Lisboa, Portugal

09:00 - 09:20am: Data-Driven Macroscopic Energy Consumption Estimation for Electric Vehicles with Different Information Availability
Xuewei Qi, Yaotian Zhang
Department of Electrical and Computer Engineering, University of California Riverside, USA; Department of Mechanical Eng., California State Polytechnic University, Pomona, USA

09:20 - 09:40am: A New Structure Representation for RNA and Fast RNA Substructure Search
Abdullah N. Arslan, Jithendar Anandan, Eric Fry, Rabindra Pandey, Keith Monschke
Texas A & M University-Commerce, Texas, USA

09:40 - 10:00am: A Survey on Current Requirement Process Practices in Software Companies and Requirement Process Problems
Fauqia Ilyas, Kinza Zahra, Nadia Ambreen, Wasi Haider Butt
National University of Sciences and Technology, Islamabad, Pakistan

10:00 - 10:20am: **BREAK**

- SESSION 3E-ISED: (CONCURRENT SESSION WITH SESSIONS 1E-ISHI, 2E-ISOT, & 4D-ISAI-ISCI)**
SYMPOSIUM ON EDUCATION (CSCI-ISED)
Co-Chairs: Dr. Ching-Yu (Austin) Huang;
Department of Computer Science, Kean University,
Union, New Jersey, USA
December 16, 2016 (Friday); 10:20am - 12:40pm
(LOCATION: Ballroom 8)
- 10:20 - 10:40am: Cybersecurity in Computer Organization Course: A Mix of Digital Logic Circuit Design and Assembly Programming with Data Security Concepts
 Angkul Kongmunvattana, Muhammad Rahman
 Department of Computer Science and Information Technology,
 Clayton State University, Morrow, Georgia, USA
- 10:40 - 11:00am: Teaching Entity-Relationship Models Effectively
 Tauqeer Hussain
 Department of Computer Science and Information Technology,
 Kutztown University of Pennsylvania, USA
- 11:00 - 11:20am: Summer Programming Boot Camp; Teach high schoolers first and let them teach middle Schoolers
 Joshua Lee, Samantha Jun, Kyubin Kim, Ilmi Yoon
 Dougherty Valley High School, San Ramon, California, USA;
 Computer Science Department, San Francisco State University,
 San Francisco, California, USA
- 11:20 - 11:40am: Experiences in Teaching to Help Retain Historically Disadvantaged Groups of STEM Students
 Eamon P. Doherty
 Fairleigh Dickinson University, New Jersey, USA
- 11:40a - 12:00p: Low Cost Motor Control Systems Laboratory Kit for Distance Learning Courses
 Theodore Grosch, Hai T. Ho
 Electrical Engineering Department, Kennesaw State University,
 Marietta, Georgia, USA
- 12:00 - 12:20pm: An Innovative Proposal for Young Students to Learn Computer Science and Technology Through Pokemon Go
 Ching-Yu Huang
 Department of Computer Science, Kean University, Union,
 New Jersey, USA
- 12:20 - 12:40pm: Let There Be Hope: Assessing the Implications of Exam Re-Taking on Student Learning Outcomes and Grades of Engineering Students Grounded on Metacognition Awareness Framework
 Abdel-Hameed A. Badawy, Mohammad Ibrahim, Spencer Benson
 Klipsch School of Electrical and Computer Engineering,
 New Mexico State University, Las Cruces, New Mexico, USA;
 Department of Curriculum and Instruction, Arkansas Tech
 University, Russellville, Arkansas, USA; Faculty of Health
 Sciences, University of Macau, Taipa, Macau, SAR, P. R. China
- 12:40 - 01:20pm: LUNCH (On Your Own)

- SESSION 3F-ISPD: (CONCURRENT SESSION WITH SESSIONS 1F-ISPC & 2F-ISMC)
 SYMPOSIUM ON PARALLEL & DISTRIBUTED COMPUTING AND
 COMPUTATIONAL SCIENCE (CSCI-ISPD)
 Co-Chairs: Dr. Izzat Alsmadi* and Crystal Cobb**;
 *Texas A&M University, San Antonio, Texas, USA;
 **Bowie State University, Bowie, Maryland, USA
 December 16, 2016 (Friday); 01:20pm - 03:00pm
 (LOCATION: Ballroom 8)**
- 01:20 - 01:40pm: GPU-accelerated Solution of Activated Sludge Model's
 System of ODEs with a High Degree of Stiffness
 Jamal Alikhani, Arash Massoudieh, Ujjal K. Bhowmik
 Electrical Engineering and Computer Science Department,
 The Catholic University of America, Washington, DC, USA
- 01:40 - 02:00pm: Exploiting Data Parallelism for Efficient Classification
 of Multi-Dimensional Patterns
 Boguslaw Cyganek, Michal Wozniak
 AGH University of Science and Technology, Poland;
 Wroclaw University of Technology, Wroclaw, Poland
- 02:00 - 02:20pm: Multicore Real Time Feature Detection System using Thermal
 Video for Nondestructive Testing
 Moath Alsafasfeh, Ikhlas Abdel-Qader
 Department of Electrical and Computer Engineering,
 Western Michigan University, Kalamazoo, Michigan, USA
- 02:20 - 02:40pm: Network Parallelization in HPC Clusters
 Izzat Alsmadi, Dianxiang Xu
 University of Texas A&M, San Antonio, Texas, USA;
 Boise State University, Boise, ID, USA
- 02:40 - 03:00pm: Adaptive Task Partitioning for Bayesian Applications
 Elise de Doncker, Ahmed Almulihi
 Western Michigan University, Kalamazoo, Michigan, USA
- 03:00 - 03:40pm: **POSTER/DISCUSSION SESSIONS B-CSCI
 December 16, 2016 (Friday)
 (LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
 Refreshments will be available.
 List of poster papers appears at the end of December 16's schedule.**

- SESSION 3G-ISCS: (CONCURRENT SESSION WITH SESSIONS 1G-ISPC & 2G-ISMC)
SYMPOSIUM ON COMPUTATIONAL SCIENCE (CSCI-ISCS)
Co-Chairs: Prof. Michal Wozniak;
Department of Systems and Computer Networks,
Wroclaw University of Technology, Poland
December 16, 2016 (Friday); 03:40pm- 06:00pm
(LOCATION: Ballroom 8)**
- 03:40 - 04:00pm: Change Detection in Satellite Images using Singular Values
and Data Mining Techniques
QuocNam Tran, A. Aafaque
The University of South Dakota, USA
- 04:00 - 04:20pm: Sliding Mode Control for a Liquid Level System
Serafin Ramos Paz, Juan Anzures Marin, and
Elisa Espinosa-Juarez
Faculty of Electrical Engineering, Universidad Michoacana
de San Nicolas de Hidalgo, Mexico
- 04:20 - 04:40pm: Fast Regular Expression Matching in a Large Static Text
Fatma Abu Hawas, Abdullah N. Arslan
Texas A & M University - Commerce, Texas, USA
- 04:40 - 05:00pm: Hierarchical Temporal Mobility Analysis with Semantic
Labeling
Adele Hedrick, Ken Q. Pu, Ying Zhu
University of Ontario Institute of Technology, Canada
- 05:00 - 05:20pm: User-dependent Sign Language Recognition Using Motion
Detection
Mohamed Hassan, Khaled Assaleh, Tamer Shanableh
American University of Sharjah, Sharjah,
United Arab Emirates (UAE)
- 05:20 - 05:40pm: Securing Webpages with the EasyIPBlocker
Maurice Reed, Zizhong John Wang
Virginia Wesleyan College, Norfolk, Virginia, USA
- 05:40 - 06:00pm: FREE SLOT
- 08:00p - 10:00p: CONFERENCE RECEPTION DINNER / SOCIAL
December 16, 2016 (Friday); 08:00 - 10:00pm
(LOCATION: BALLROOMS 6, 7, AND 8)**

-----> SESSIONS SCHEDULED IN GOLD CONFERENCE ROOM - DECEMBER 16 <-----

**SESSION 4D-ISAI-ISCI: (CONCURRENT SESSION WITH SESSIONS 1D-ISHI, 1E-ISHI, 2D-ISBD,
2E-ISOT, 3D-ISCS, & 3E-ISED)
COMBINED SYMPOSIUMS ON ARTIFICIAL INTELLIGENCE (CSCI-ISAI) &
COMPUTATIONAL INTELLIGENCE (CSCI-ISCI)**

Co-Chairs: Dr. Sara Kambouris* and Dr. Emdad Khan;
*Infinite Dimensions Integration, Inc., USA;
**Maharishi University, Fairfield, Iowa, USA and
InternetSpeech, Inc., San Jose, California, USA
December 16, 2016 (Friday); 08:40am - 12:00pm
(LOCATION: GOLD Conference Room)**

- 08:40 - 09:00am: Fuzzy Nearest Neighbor Time Series Forecasting -
Computational Complexity
Juan Jose Flores, Felix Calderon, Elisa Espinosa, Rafael
Cedeno, Adan Garnica, Georgina Flores
Division de Estudios de Posgrado Universidad Michoacana
Morelia, Michoacan, Mexico
- 09:00 - 09:20am: SimSPRT-II: Monte Carlo Simulation of Sequential Probability
Ratio Test Algorithms for Optimal Prognostic Performance
Tahereh Masoumi, Kenny C. Gross
Oracle Physical Sciences Research Center, Oracle Corporation,
San Diego, California, USA
- 09:20 - 09:40am: Modeling Characteristic Curves of Digital Overcurrent Relay
(DOCR) for User-defined Characteristic Curve using
Artificial Neural Network
Anang Tjahjono, Ardyono Priyadi, Margo Pujiantara, Mauridhi
Hery Purnomo, Taufik Taufik, Ali Shaban, Xiao-Hua Yu
Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia;
California Polytechnic State University, San Luis Obispo, USA
- 09:40 - 10:00am: Comparing Domains of Application for Electronic Debate
Platforms - Product Evaluation vs. Commented News
Marius Silaghi, Abdulrahman Alqahtani
Department of Computer Science, Najran University, Najran,
Saudi Arabia; Department of Computer Science, Florida
Institute of Technology, Melbourne, Florida, USA
- 10:00 - 10:20am: Comparative Analysis of Phonetic Algorithms Applied to Spanish
Axel A. Garcia Fuentes, Irene Payan Parra,
J. Ubaldo Quevedo-Torrero, Rogelio Davila Perez
Universidad Autonoma de Guadalajara, Zapopan, Jalisco, Mexico;
University of Wisconsin Parkside, Wisconsin, USA
- 10:20 - 10:40am: Majority Based Ensemble Framework for Feature Selection
Using Rough Set
Syed Hasnain Ali, Abdul Wahab Muzaffar
Department of Computer Engineering, National University of
Sciences and Technology, Islamabad, Pakistan
- 10:40 - 11:00am: UPS: A New Approach for Multiple Sequence Alignment
QuocNam Tran, Mike Wallinga
The University of South Dakota, USA

- 11:00 - 11:20am: Estimating Distracted Pedestrian from Deviated Walking Considering Consumption of Working Memory
Yoshihiro Uemura, Yusuke Kajiwara, Hiromitsu Shimakawa
Graduate School of Information Science and Engineering, Ritsumeikan University, Japan; College of Information Science and Engineering, Ritsumeikan University, Japan
- 11:20 - 11:40am: Ontology Based Multi Criteria Recommended System to Guide Internship Assignment Process
Abir M'baya, Jannik Laval, Nejib Moalla, Yacine Ouzrout, and Abdelaziz Bouras
Universite de Lyon, Universite Lumiere Lyon 2, DISP Lab, France; CSE Department, Qatar University, Doha, Qatar
- 11:40a - 12:00p: FREE SLOT
- 12:00 - 12:20pm: FREE SLOT
- 12:20 - 01:20pm: LUNCH (On Your Own)
- 01:20 - 06:00pm: During this period, the attendees are encouraged to participate in any of the following sessions: 1F-ISPC, 1G-ISPC, 2F-ISMC, 2G-ISMC, 3F-ISPD, and/or 3G-ISCS). These sessions discuss topics that significantly overlap the scope of Artificial Intelligence (CSCI-ISAI) & Computational Intelligence (CSCI-ISCI).

LIST OF PAPERS IN POSTER/DISCUSSION SESSIONS B-CSCI

03:00 - 03:40pm; December 16, 2016 (Friday)
(LOCATION: 2nd Floor, EAST Foyer; next to East Ballrooms)
Refreshments will be available.

- 0. Cancer Classification Based on Microarray Gene Expression Data Using Deep Learning
Pablo Guillen, Jerry Ebalunode
Center for Advanced Computing and Data Systems,
University of Houston, Houston, Texas, USA
- 0. A Modeling Approach to Hardware Analysis of the Heterogeneous DEAC Cluster
Riana J. Freedman, Damian Valles
Wake Forest University, Winston-Salem, North Carolina, USA
- 0. Asynchronous Multicore Microprocessors: An Eco-friendly Technology for Green Computing
T. Mogale, M. B. Esiefarienrhe, N. Gasela
North West University, Mafikeng Campus, South Africa
- 0. On Full-Duplex Communication in Cooperative Cognitive Radio Networks
Seungwon Lee, Sangwoo Park, Iickho Song, Yalei Zhang, and Nguyen T. P. Mai
Korea Advanced Institute of Science and Technology, Korea
- 0. Object Segmentation in Image Sequences Using Reinforcement Learning
Farhang Sahba
Sheridan Institute of Technology and Advanced Learning,
Toronto, Canada
- 0. A Hybrid Approach to Detect Traffic Anomalies in Large-Scale Data Networks
Xin Sun, Fu-Shing Sun
Ball State University, Muncie, Indiana, USA
- 0. Browser Performance of JavaScript Framework, SAPUI5 and jQuery
Jaime Raigoza, Rushi Thakkar
California State University Chico, California, USA

- 0. GIS Map Encryption Algorithm for Drone Security Based on Geographical Features
Giao Pham Ngoc, Kwang-Seok Moon, Suk-Hwan Lee, Ki-Ryong Kwon
Pukyong National University, Pusan, South Korea;
Tongmyong University, Pusan, South Korea
- 0. Architecture Based Approaches Supporting Flexible Design of Self-Adaptive Software
JungEun Cha, YoungJoon Jung, JungSi Kim
Embedded Software Platform Research Team, Electronics
Telecommunication Research Institute (ETRI), Dajeon, Korea
- 0. ViewModel Visualization Tool
Petr Capek, Erik Kral, Roman Senkerik
Tomas Bata University in Zlin, Czech Republic
- 0. Incremental Self-Evolving Framework for Agent-Based Simulation
Dong-Oh Kang, Jang Won Bae, Euihyun Paik
Data Analysis Software Research Section, Electronics and
Telecommunications Research Institute, Daejeon, Korea
- 0. System Interrupt's Automation of Cycle Setting
Mengya Li, Shigeki Nankaku
Osaka Electro-Communication University, Osaka, Japan
- 0. ...

DECEMBER 17, 2016

THERE ARE THREE SETS OF CONCURRENT SESSIONS ON December 17, 2016;
SCHEDULED IN BALLROOM 6, BALLROOM 7, AND BALLROOM 8.

-----> SESSIONS SCHEDULED IN BALLROOM 6 - DECEMBER 17 <-----

- SESSION 1H-ISHI: (CONCURRENT SESSION WITH SESSIONS 2H-ISOT & 3H-ISPD)**
SYMPOSIUM ON HEALTH INFORMATICS & MEDICAL SYSTEMS (CSCI-ISHI)
Co-Chairs: TBA
December 17, 2016 (Saturday); 08:20am - 10:00am
(LOCATION: Ballroom 6)
- 08:20 - 08:40am: Donaxi@Home's Project; Service Robot to Elderly Care
Hector Vargas, Rodrigo Ortega, Luis Felipe Velazquez, Alvaro Bravo, Sebastian Gamboa, Rene Cruz, Harold Vasquez, Aldo Fonseca, Dulce Teutli, Irais Miranda, Gustavo Vargas, and Eduardo Arce
Popular Autonomous University of Puebla (UPAEP), Puebla, Mexico
- 08:40 - 09:00am: FREE SLOT
- 09:00 - 09:20am: The Steps of User-centered Design in Health Information Technology Development
Berglind Fjola Smaradottir
Centre for eHealth and Health Care Technology, Faculty of Engineering and Science and Faculty of Health and Sport Sciences, University of Agder, Kristiansand, Norway
- 09:20 - 09:40am: MH-ARM: A Multi-mode and High-value Association Rule Mining Technique
Libao Yang, Zhe Li, Jinlin Li
Beijing Institute of Technology, P. R. China;
Tianjin University, P. R. China
- 09:40 - 10:00am: IS Budgeting for Healthcare Innovations: Insights for Developing Countries
Nikunj Agarwal, Sebastian M P
Indian Institute of Management Kozhikode, India
- 10:00 - 10:20am: BREAK
- SESSION 1I-ISHI-ISPC: (CONCURRENT SESSION WITH SESSIONS 2H-ISOT, 2I-ISMC, & 3I-ISED)**
COMBINED SYMPOSIUMS ON HEALTH INFORMATICS & MEDICAL SYSTEMS (CSCI-ISHI) & SIGNAL AND IMAGE PROCESSING, COMPUTER VISION AND PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: TBA
December 17, 2016 (Saturday); 08:20am - 12:20pm
(LOCATION: Ballroom 6)
- 10:20 - 10:40am: Characteristics of Inpatient Fever: A Case in Teaching Hospital
S. F. Tseng, Frank Huang
MIS NCCU, Taipei, Taiwan
- 10:40 - 11:00am: 6dB SNR Improved 64 Channel Hearing Aid Development Using CSR8675 Bluetooth Chip
S. Jarng, A. Amatya, Y. Kwon, D. Jarng
Chosun University, Korea; Algorkorea Co. Ltd., Seoul, Korea;
Biola University, Los Angeles, California, USA

- 11:00 - 11:20am: Technostress, Coping and Job Satisfaction Model of Information Systems
Mohamed Salah-Eddine, Mustapha Belaissaoui
Information Systems and Decision Support Laboratory, ENCG,
University Hassan, Morocco
- 11:20 - 11:40am: Generation of Sentence Template Graph from SOAP Format
Medical Documents
Naoya Onimura, Takanori Yamashita, Naoki Nakayama,
Hidehisa Soejima, Sachio Hirokawa
Kyushu University, Fukuoka, Japan;
Saiseikai Kumamoto Hospital, Kumamoto, Japan
- 11:40a - 12:00p: Categorization of Ecosystems based on Soundscape Analysis: a
perspective from image classification
Daniel Gaitan, Claudia Isaza, William Gomez, Juan Daza
Universidad de Antioquia UdeA, Medellin, Colombia
- 12:00 - 12:20pm: A Comparison Between Camera Calibration Software Toolboxes
James Rothenflue, Nancy Gordillo-Herrejon, Ramazan S. Aygun
The University of Alabama in Huntsville, Alabama, USA
- 12:20 - 01:20pm: LUNCH (On Your Own)
- SESSION 1J-ISPC: (CONCURRENT SESSION WITH SESSIONS 2J-ISMC & 3J-ISCS)
SYMPOSIUMS ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION
AND PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: Prof. Leon Deligiannidis;
Wentworth Institute of Technology,
Massachusetts, USA
December 17, 2016 (Saturday); 01:20pm - 03:20pm
(LOCATION: Ballroom 6)**
- 01:20 - 01:40pm: IDE-3D: Predicting Indoor Depth Utilizing Geometric and
Monocular Cues
Taylor Ripke, Roger Lee
Central Michigan University, Mount Pleasant, Michigan, USA
- 01:40 - 02:00pm: An Approach of Locating Korean Vehicle License Plate Based on
Mathematical Morphology and Geometrical Features
Ihsan Ullah, Hyo Jong Lee
Chonbuk National University, Jeonju, South Korea
- 02:00 - 02:20pm: Fingerprint Matching on Smart Card: A Review
Kedimotse Baruni, Albert Helberg
Modeling and Digital Science, Council for Scientific and
Industrial Research (CSIR), Pretoria, South Africa;
North-West University, Potchefstroom, South Africa
- 02:20 - 02:40pm: Arrhythmia Classification via K-Means based Polyhedral Conic
Functions Algorithm
Emre Cimen, Gurkan Ozturk
Anadolu University, Industrial Engineering, Eskisehir, Turkey
- 02:40 - 03:00pm: Evaluation of The Reliability of Iris Recognition Biometric
Authentication Systems
Abdulrahman Alqahtani
Florida Institute of Technology, Melbourne, Florida, USA

- 03:00 - 03:20pm: Edge-aware Weighting Enhanced Saliency Segmentation of Pests Images
Yi Zhao, Xiaohui Li
AInML LAB, School of Electronics and Control Engineering,
Chang'An University, Xi'An, P. R. China
- SESSION 1K-ISPC: (CONCURRENT SESSION WITH SESSIONS 2K-ISMC & 3K-ISAI)
SYMPOSIUMS ON SIGNAL & IMAGE PROCESSING, COMPUTER VISION
AND PATTERN RECOGNITION (CSCI-ISPC)
Co-Chairs: Prof. Dr. Mohammad Inayatullah Khan Babar;
UET Peshawar, Pakistan
December 17, 2016 (Saturday); 03:20pm - 05:00pm
(LOCATION: Ballroom 6)**
- 03:20 - 03:40pm: Overview of Current Biomedical Image Segmentation Methods
Maedeh Sadat Fasihi, Wasfy B. Mikhael
University of Central Florida, Orlando, Florida, USA
- 03:40 - 04:00pm: Multi-focus Image Fusion Based on Focused Regions Detection
Weiguo Wan, Hyo Jong Lee
Chonbuk National University, Jeonju, Korea; Center for
Advanced Image and Information Technology, Chonbuk National
University, Jeonju, Korea
- 04:00 - 04:20pm: Ethnicity Prediction and Classification from Iris Texture
Patterns: A Survey on Recent Advances
Gugulethu Mabuza-Hocquet, Fulufhelo Nelwamondo, and
Tshilidzi Marwala
Council for Scientific and Industrial Research, Modelling
and Digital Science, Pretoria, South Africa;
University of Johannesburg, South Africa
- 04:20 - 04:40pm: 2D Methods for Pose Invariant Face Recognition: A Review
Nthabiseng Mokoena, Hippolyte Djonon Tsague, Albert Helberg
Council for Scientific and Industrial Research (CSIR),
South Africa; North-West University (NWU), South Africa
- 04:40 - 05:00pm: Integrated Learning System for Object Recognition from
Images based on Convolutional Neural Network
Hyeok-june Jeong, Myung-jae Lee, Young-guk Ha
Konkuk University, Seoul, Korea

-----> SESSIONS SCHEDULED IN BALLROOM 7 - DECEMBER 17 <-----

- SESSION 2H-ISOT: (CONCURRENT SESSION WITH SESSIONS 1H-ISHI, 1I-ISHI, 3H-ISPD, & 3I-ISED)**
SYMPOSIUM ON INTERNET OF THINGS & INTERNET OF EVERYTHING (CSCI-ISOT)
Co-Chairs: Prof. Dr.-Ing. habil. Christian-Andreas Schumann* & Prof. Neli P. Zlatareva**
***West Saxon University of Applied Science Zwickau, Germany**
****Central Connecticut State University, USA**
December 17, 2016 (Saturday); 08:20am - 11:00am
(LOCATION: Ballroom 7)
- 08:20 - 08:40am: A Collaborative Privacy-Preserving Deep Learning System in Distributed Mobile Environment
Menghan Liu, Haotian Jiang, Jia Chen, Alaa Badokhon, Xuetao Wei, Ming-Chun Huang
Case Western Reserve University, Cleveland, Ohio, USA;
University of Cincinnati, Cincinnati, Ohio, USA
- 08:40 - 09:00am: Efficient Security Adaptation Framework for IoT Networks
Tewfiq El-Maliki, Jean-Marc Seigneur
HEPIA Geneva, University of Applied Sciences Western Switzerland; University of Geneva, Advanced Systems Group, Switzerland
- 09:00 - 09:20am: An Overview of Emerging Privacy Issues in the Internet of Things
Mahran Al-Zyoud, Travis Atkison, Jeffrey Carver
University of Alabama, Alabama, USA
- 09:20 - 09:40am: Remote Rendering and Rendering in Virtual Machines
Daniel J. Paradis, Bruce Segee
University of Maine, Orono, Maine, USA
- 09:40 - 10:00am: A Case Study on the Trade-Offs between Security, Scalability, and Efficiency in Smart Home Sensor Networks
Thomas Reichherzer, Amitabh Mishra, Ezhil Kalaimannan, and Norman Wilde
The University of West Florida, Pensacola, Florida, USA
- 10:00 - 10:20am: BREAK**
- 10:20 - 10:40am: Processing RDF Triplestores in Front-End Applications Based on Context-Dependent Rules
Neli P. Zlatareva
Central Connecticut State University, Connecticut, USA
- 10:40 - 11:00am: Development of an Electronic Fare Collection System Using Stationary Tap-Out Devices
Omoruyi Osemwegie, Samuel John, Kennedy Okokpujie, and Ibukun Shorinwa
Covenant University, Ota, Ogun State, Nigeria

**SESSION 2I-ISMIC: (CONCURRENT SESSION WITH SESSIONS 1I-ISHI & 3I-ISED)
SYMPOSIUM ON MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY
(CSCI-ISMIC)**

**Co-Chairs: Crystal Cobb;
Bowie State University, Bowie, Maryland, USA
December 17, 2016 (Saturday); 11:00am - 12:00pm
(LOCATION: Ballroom 7)**

- 11:00 - 11:20am: Session Duration Based Feature Extraction for Network Intrusion Detection in Control System Networks
Stanislav Ponomarev, Travis Atkison
BBN Technologies, Cambridge, MA, USA;
University of Alabama, Tuscaloosa, Alabama, USA
- 11:20 - 11:40am: The High Speed Wireless Data Receiver With LCL Matching Circuits
Ki-Jin Kim, K. H. Ahn
ICT Device & Packaging, Korea Electronics Technology Institutes, Gyeonggi-do, Korea
- 11:40a - 12:00p: Knowledge Acquisition and Representation in Facility Management
Michael Claub, Eric Forkel M. A., Janek Gotze, Andre Lanka, Frank Otto, habil. Christian-Andreas Schumann
West Saxon University of Applied Science Zwickau, Germany
- 12:00 - 01:00pm: **LUNCH (On Your Own)**
- SESSION 2J-ISMIC: (CONCURRENT SESSION WITH SESSIONS 1J-ISPC & 3J-ISCS)
SYMPOSIUM ON MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY
(CSCI-ISMIC)**
- Co-Chairs: Prof. Tewfiq El Maliki;
University of Applied Sciences Geneva, Switzerland
December 17, 2016 (Saturday); 01:00pm - 03:00pm
(LOCATION: Ballroom 7)**
- 01:00 - 01:20pm: FREE SLOT
- 01:20 - 01:40pm: Large-Scale Detection of DOM-based XSS Based on Publisher and Subscriber Model
Trong Kha Nguyen, Seong Oun Hwang
Hongik University, Chungnam, Korea
- 01:40 - 02:00pm: Modelling of the State of Systems with Defensive Deception
Sharif Hassan, Ratan Guha
University of Central Florida, Orlando, USA
- 02:00 - 02:20pm: Preliminary Results of Applying Machine Learning Algorithms to Android Malware Detection
Matthew Leeds, Travis Atkison
University of Alabama, Tuscaloosa, Alabama, USA
- 02:20 - 02:40pm: Role of Anycasting in Threshold-optimized Depth-based Routing Protocol for Underwater Wireless Networks
Taseer Khan, Sheeraz Ahmad, Mohammad Inayatullah Babar
UET, Peshawar, Pakistan
- 02:40 - 03:00pm: FREE SLOT
- 03:00 - 03:20pm: **BREAK**

SESSION 2K-ISMC: (CONCURRENT SESSION WITH SESSIONS 1K-ISPC & 3K-ISAI)
SYMPOSIUM ON MOBILE COMPUTING, WIRELESS NETWORKS, & SECURITY
(CSCI-ISMC)
Co-Chairs: Dr. Travis Atkison;
The University of Alabama, Tuscaloosa, Alabama, USA
December 17, 2016 (Saturday); 03:20pm - 05:00pm
(LOCATION: Ballroom 7)

- 03:20 - 03:40pm: Synopsis of Security: Using Kerberos Method to Secure File Transfer Sessions
Fadi Al-Ayed, Hang Liu
The Catholic University of America, Washington D.C., USA
- 03:40 - 04:00pm: Performance Evaluation of Intrusion Detection System Using Anomaly and Signature based Algorithms to Reduction False Alarm Rate and Detect Unknown Attacks
Safwan Mawlood Hussein
Department of CE, Ishik University, Erbil, Iraq
- 04:00 - 04:20pm: Effect of Increasing Buffer Size on Prioritized Guard Channels with Queue During Call Traffic Congestion
Adeyinka A. Adewale, Emmanuel R. Adagunodo, Samuel N. John, and Charles N. Ndujiuba
Covenant University, Canaanland, Ota, Ogun State, Nigeria;
Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria
- 04:20 - 04:40pm: Performance Evaluation of Dynamic Guard Channels Assignment with Queue and Prioritized Schemes
Adeyinka A. Adewale, Samuel N. John, Victor O. Matthews, Charles N. Ndujiuba, Adebisi A. Adedokun
College of Engineering, Covenant University, Nigeria
- 04:40 - 05:00pm: Detection and Prevention of Distributed Denial of Service Attacks in VANETs
Munazza Shabbir, Muazzam A. Khan, Umair Shafiq Khan, and Nazar A. Saqib
National University of Sciences & Tech. Islamabad, Pakistan

-----> SESSIONS SCHEDULED IN BALLROOM 8 - DECEMBER 17 <-----

SESSION 3H-ISPD: (CONCURRENT SESSION WITH SESSIONS 2H-ISOT & 1H-ISHI)
SYMPOSIUM ON SYMPOSIUM ON PARALLEL & DISTRIBUTED COMPUTING
AND COMPUTATIONAL SCIENCE (CSCI-ISPD)
Co-Chairs: Dr. Abdel-Hameed Badawy;
School of Electrical and Computer Engineering,
New Mexico State University, New Mexico, USA
December 17, 2016 (Saturday); 08:20am - 10:00am
(LOCATION: Ballroom 8)

- 08:20 - 08:40am: A Perspective from Exploiting Heterogeneity on Networks-on-Chip Based on Dark Silicon Mitigation
Juan Fang, Min Cai, Zhenyu Leng, Sitong Liu
Beijing University of Technology, P. R. China;
State Key Laboratory of Computer Architecture, Institute of Computing Technology, P. R. China
- 08:40 - 09:00am: Level-synchronous BFS Algorithm Implemented in Java Using PCJ Library
Magdalena Ryczkowska, Marek Nowicki, Piotr Bala
Nicolaus Copernicus University, Poland;

- 09:00 - 09:20am: Ranking Anomalous High Performance Computing Sensor Data Using Unsupervised Clustering
Adam Morrow, Elisabeth Baseman, Sean Blanchard
Brigham Young University, Provo, Utah, USA;
Los Alamos National Laboratory, Los Alamos, New Mexico, USA
- 09:20 - 09:40am: A Consideration on Compression Level Control for Dynamic Compressed Data Transfer Method
Kanemitsu Ootsu, Takashi Yokota, Takeshi Ohkawa
Graduate School of Engineering, Utsunomiya University,
Utsunomiya, Tochigi, Japan
- 09:40 - 10:00am: Database Replication for Optimal Performance in Parallel BLAST
Guanghua Zhao
Fayetteville State University, North Carolina, USA
- SESSION 3I-ISED: (CONCURRENT SESSION WITH SESSIONS 2H-ISOT, 2I-ISMC, & 1I-ISHI)
SYMPOSIUM ON EDUCATION (CSCI-ISED)
Co-Chairs: TBA
December 17, 2016 (Saturday); 10:00am - 12:40pm
(LOCATION: Ballroom 8)**
- 10:00 - 10:20am: Minimizing Effort for ABET Student Outcomes Assessment While Maintaining Effective Results
Jeffrey Miller
Department of Computer Science, University of Southern California,
Los Angeles, California, USA
- 10:20 - 10:40am: Incorporating Generating Functions to Computational Science Education
Jun Zhang, Fangyang Shen, Yan Waguespack
University of Maryland Eastern Shore, Maryland, USA;
New York City College of Technology, City University of New York,
Brooklyn, New York, USA; University of Maryland Eastern Shore,
Maryland, USA
- 10:40 - 11:00am: Virtual Reality for Digital User Experience and Interactive Learning Based on User Satisfaction: A Pilot Study
Fanfan Chen, Yang-Cheng Lin, Jen-Wei Chien, Cheng-En Tsai
National Dong Hwa University, Hualien, Taiwan;
National Taipei University of Business, Taoyuan, Taiwan
- 11:00 - 11:20am: Bioinformatics Sister Courses - An Interdisciplinary Collaborative Learning Framework to Teach Bioinformatics
Elena Y. Harris, David Keller, David Stachura, Gordon Wolfe
California State University, Chico, California, USA
- 11:20 - 11:40am: Empirical Confirmation Of Pair Programming Effectiveness in the Teaching of Computer Programming
Bassey Isong, Thuso Moemi, Nosipho Dladlu, Neo Motlhabane,
Ohaeri Ifeoma, Naison Gasela
North-West University, MaSIM Research Focus, South Africa
- 11:40a - 12:00p: Rural Minorities in Computing Education: A Study of Rural Schools with No CS IT Courses in Oklahoma
Myung Ah Park, Jaehee Lee
University of Central Oklahoma, Edmond, Oklahoma, USA
- 12:00 - 12:20pm: Programming Online Judge System
Yong-qiang Chen, Cheng-bin Quan, Yuchao Gao
Tsinghua University, Beijing, P. R. China

12:20 - 12:40pm: Software for Academic Registration for IUT SAIDA
Haissam Hajjar, Abdelsalam Hajjar
University Institute of Technology, Lebanese University,
Saida, Lebanon

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

SESSION 3J-ISCS: (CONCURRENT SESSION WITH SESSIONS 1J-ISPC & 2J-ISMC)
SYMPOSIUM ON Computational Science (CSCI-ISCS)
Co-Chairs: TBA
December 17, 2016 (Saturday); 01:20pm - 03:00pm
(LOCATION: Ballroom 8)

01:20 - 01:40pm: Towards Generic Institutional Biometric Authentication System
Bassef Isong, Ohaeri Ifeama, Michael Esiefarienrhe
North-West University, Mafikeng, South Africa

01:40 - 02:00pm: Data Acquisition for, and Analysis Of, Word Frequencies
in the English Language
Kameron Shrum, Jeffrey Hood, David Rankin
Midwestern State University, Wichita Falls, Texas, USA

02:00 - 02:20pm: Ambiguity as a Barrier to Information Security Policy
Compliance: A Content Analysis
Mokateko Portia Buthelezi, John Andrew Van Der Poll, and
Elisha Ochola
University of South Africa, Florida, South Africa;
Midrand, South Africa

02:20 - 02:40pm: Education Ontology Modeling for Competency Gap Analysis
Abdelaziz Bouras, Alanood A. Zainal
Department of Computer Science and Engineering,
Qatar University, Doha, Qatar

02:40 - 03:00pm: Evaluating Performance of Symmetric Encryption Algorithms
Jaime Raigoza, Kapil Jituri
California State University Chico, California, USA

03:00 - 03:20pm: BREAK

SESSION 3K-ISAI: (CONCURRENT SESSION WITH SESSIONS 1K-ISPC & 2K-ISMC)
SYMPOSIUM ON ARTIFICIAL INTELLIGENCE (CSCI-ISAI)
Co-Chairs: Prof. Neli P. Zlatareva;
Department of Computer Science, Central Connecticut
State University, New Britain, Connecticut, USA
December 17, 2016 (Saturday); 03:20pm - 05:00pm
(LOCATION: Ballroom 8)

03:20 - 03:40pm: Estimating Occupancy from Measurement and Knowledge with
Bayesian Networks
Manar Amayri, Quoc-Dung Ngo, Stephane Ploix
G-SCOP Laboratory, Grenoble Institute of Technology,
Grenoble, France; Posts and Telecommunications, Institute
of Technology, Hanoi, Vietnam

03:40 - 04:00pm: Real Life Machine Learning Case on Mobile Advertisement
Sadi Evren Seker
Department of Computer Science, Smith College,
Northampton, Massachusetts, USA

04:00 - 04:20pm: Syntactic Model for Russian: Deep Learning Models with
Dependency Parsing Scheme
Aleksandr Sboev, Roman Rybka, Ivan Moloshnikov, Dmitriy
Gudovskih, Anton Selivanov, Igor Ivanov
NRC, "Kurchatov Institute", Moscow, Russia; National
Research Nuclear University MEPhI, Moscow, Russia

04:20 - 04:40pm: FREE SLOT

04:40 - 05:00pm: FREE SLOT