

List of Conference Rooms:

- Ballroom 1
- Ballroom 2
- Ballroom 3
- Ballroom 4
- Ballroom 5
- Copper
- Gold
- Platinum
- Silver
- Sterling A/B/C



WORLD COMP '14

Conference Floor Map

TABLE OF CONTENTS

Registration Dates and Times + Dinner.....	1
Conferences Acronyms and Their Full Titles.....	2
Partial List of Additional Keynotes and Invited Talks.....	3
Planned Tutorials.....	4
Conference Programs and Schedules:	
ABDA, ICOMP and GCA	7
BIOCOMP.....	20
DMIN.....	31
FCS, ESA, MSV and CSC.....	38
FECS and SWWS.....	51
ICAI.....	64
ICWN.....	79
IKE and GEM.....	91
IPCV.....	99
PDPTA.....	112
SAM.....	126
SERP and EEE.....	137

REGISTRATION DATES AND TIMES & CONFERENCE PACKAGE PICKUP

July 20, 2014 (Sunday):

03:00pm - 08:30pm
(LOCATION: Second Floor, Conference Lobby: 1-5)

July 21, 2014 (Monday):

06:45am - 05:00pm
(LOCATION: Second Floor, Conference Lobby: 1-5)

July 22, 2014 (Tuesday):

06:45am - 05:00pm
(LOCATION: Second Floor, Conference Lobby: 1-5)

July 23, 2014 (Wednesday):

06:45am - 05:00pm
(LOCATION: Second Floor, Conference Lobby: 1-5)

July 24, 2014 (Thursday):

06:45am - 05:00pm
(LOCATION: Second Floor, Conference Lobby: 1-5)

CONFERENCE RECEPTION DINNER / SOCIAL

July 21, 2014 (Monday):

09:00 - 11:45pm
(LOCATION: Ballrooms 1-5)

CONFERENCES ACRONYMS AND THEIR FULL TITLES

ABDA'14:	The 1st International Conference on Advances in Big Data Analytics
BIOCOMP'14:	The 15th International Conference on Bioinformatics & Computational Biology
CSC'14:	The 12th International Conference on Scientific Computing
DMIN'14:	The 10th International Conference on Data Mining
EEE'14:	The 13th International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government
RSA'14:	The International Conference Reconfigurable Systems and Algorithms
ESA'14:	The 12th International Conference on Embedded Systems and Applications
FCS'14:	The 10th International Conference on Foundations of Computer Science
FECS'14:	The 10th International Conference on Frontiers in Education: Computer Science and Computer Engineering
GCA'14:	The 10th International Conference on Grid & Cloud Computing and Applications
GEM'14:	The 11th International Conference on Genetic & Evolutionary Methods
ICAI'14:	The 16th International Conference on Artificial Intelligence
ICOMP'14:	The 15th International Conference on Internet Computing and Big Data
ICWN'14:	The 13th International Conference on Wireless Networks
IKE'14:	The 13th International Conference on Information & Knowledge Engineering
IPCV'14:	The 18th International Conference on Image Processing, Computer Vision, & Pattern Recognition
MSV'14:	The 11th International Conference on Modeling, Simulation and Visualization Methods
PDPTA'14:	The 20th International Conference on Parallel and Distributed Processing Techniques and Applications
SAM'14:	The 13th International Conference on Security and Management
SERP'14:	The 12th International Conference on Software Engineering Research and Practice
SWWS'14:	The 12th International Conference on Semantic Web and Web Services

PARTIAL LIST OF ADDITIONAL KEYNOTES, INVITED TALKS, & PANEL DISCUSSIONS

These talks are in addition to the focused keynotes/invited talks that appear in the individual conference schedules. The talks are open to all attendees and are scheduled in a way that various targeted attendees can attend/participate in them. This is only a partial list.

0. KEYNOTE LECTURE:

Smart Data for you and me: Personalized and Actionable Physical Cyber Social Big Data

Prof. Amit Sheth

Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive Director, Ohio Center of Excellence in Knowledge-enabled Computing (Kno.e.sis), and Professor of Computer Science, Wright State University, Ohio, USA. Prof. Sheth is one of the highest cited researchers with about 28,000 citations to his published papers.

Date & Time: 08:45am - 09:45am; July 21 (Monday), 2014

LOCATION: Monte Carlo (Blue Man Group) Theater

0. KEYNOTE LECTURE:

Visualization and Data Mining for High Dimensional Datasets

Prof. Alfred Inselberg

School of Mathematical Sciences, Tel Aviv University, Israel; Senior Fellow, San Diego Supercomputing Center; Inventor of the multidimensional system of Parallel Coordinates and author of textbook "Parallel Coordinates: VISUAL Multidimensional Geometry", (praised by Stephen Hawking among others.)

Date & Time: 09:45am - 10:45am; July 21 (Monday), 2014

LOCATION: Monte Carlo (Blue Man Group) Theater

0. KEYNOTE LECTURE:

Big Data Analytics Cognitive Algorithms

Dr. Leonid I. Perlovsky

Harvard University, Cambridge, Massachusetts, USA (School of Engineering and Applied Sciences and Medical School Athinoula Martinos Brain Imaging Center); The US Air Force Research Lab., USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force on The Mind and Brain; Recipient of John McLucas Award (the highest US Air Force Award for basic research).

Date & Time: 10:45am - 11:45am; July 21 (Monday), 2014

LOCATION: Monte Carlo (Blue Man Group) Theater

0. PANEL DISCUSSION:

Title: Thoughts, Language, and Memories for Humans vs. Artificially Intelligent Entities

PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA

PANELISTS:

Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA.

Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA.

Shelli Friess; Cognitive Psychologist, Relevant Counseling, Denver, Colorado, USA.

Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA.

Date & Time: 04:20pm - 06:00pm; July 22 (Tuesday), 2014

LOCATION: Ballroom 4

0. INVITED LECTURE:
 A Primitive Artificial Prefrontal Cortex for Cognitive Self-Regulation
 in Artificial Life Forms
 Dr. James A. Crowder
 Chief Engineer, Raytheon Intelligence, Information, and Services Aurora,
 Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and
 Artificial Intelligence Research Lab., Alexandria School of Innovation,
 Douglas County, Colorado, USA
 Date & Time: 03:40pm - 04:20pm; July 22 (Tuesday), 2014
 LOCATION: Ballroom 4
0. INVITED LECTURE:
 Big Data Issues for Mining Knowledge in Maintenance Information Systems
 Prof. Diego Galar
 Division of Operation and Maintenance Engineering, Lulea University of
 Technology, Lulea, Sweden; Former Pro-Vice-Chancellor, Aragon Institute
 for Engineering Research (I3A), Aragon, Spain.
 Date & Time: 12:00 - 01:00pm; July 22 (Tuesday), 2014
 LOCATION: Ballroom 1
0. INVITED LECTURE:
 Data Science Emergence
 Dr. Peter Geczy
 National Institute of Advanced Industrial Science and Technology (AIST),
 Japan; Institute of Physical & Chemical Research (RIKEN); Research
 Center for Future Technologies.
 Date & Time: 12:00 - 01:00pm; July 23 (Wednesday), 2014
 LOCATION: Ballroom 1
0. INVITED LECTURE:
 Integrative Systems Biology Approaches to Identify Disrupted Pathways
 in Disease Development
 Dr. Mary Qu Yang
 Director of the Joint Bioinformatics Ph.D. Program of University of
 Arkansas Little Rock College of Engineering & Information Technology,
 University of Arkansas for Medical Sciences, Arkansas, USA
 Date & Time: 05:20pm - 06:00pm; July 23 (Wednesday), 2014
 LOCATION: Platinum Room

PLANNED TUTORIALS

Each tutorial is between 1 to 3 hours long and are free to all registered attendees.

0. Accreditation Board of Engineering and Technology (ABET) Accreditation
 of Computer Science Program
 Prof. Gurdeep Singh Hura
 Fellow, Society for Design and Process Science; Senior Member, IEEE;
 CAC ABET Program evaluator;
 Chair, Department of Mathematics and Computer Science,
 University of Maryland Eastern Shore, Maryland, USA;
 Member of Editorial Board: Computer Communications (Elsevier),
 International Journal of Electronics and Reliability, and International
 Journal of Computation in Intelligence and Bioinformatics; Regional
 Editor of Journal of Integrated design and Process control (SDPS).
 Date & Time: 06:00pm; July 21 (Monday), 2014
 LOCATION: Gold Room

0. Natural Language in Information Security and Privacy
 Prof. Julia M. Taylor* and Distinguished Professor Victor Raskin**
 *Computer & Information Tech.; Fellow, CERIAS; Purdue University, USA;
 **Distinguished Professor, English & Linguistics Professor, Computer
 Science (courtesy); Professor, Computer and Information Technology
 (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue
 University, USA.
 Date & Time: 05:45pm; July 21 (Monday), 2014
 LOCATION: Copper Room
0. Energy-Aware Resource Management for Computing Systems
 Prof. H. J. Siegel
 Abell Endowed Chair Distinguished Professor of Electrical and Computer
 Engineering and Professor of Computer Science, Colorado State
 University, Fort Collins, Colorado, USA; Founding Director, CSU
 Information Science and Technology Center (ISTeC). Fellow of IEEE;
 Fellow of ACM.
 Date & Time: 05:45pm; July 21 (Monday), 2014
 LOCATION: Sterling Room
0. Cryptography and Network Security
 Dr. Asoke Nath and Ms. Joyshree Nath
 St. Xavier's College (Autonomous), Kolkata, West Bengal, India
 and B.P. Podder Institute of Technology and Management, Salt Lake
 City, West Bengal, India.
 Date & Time: 05:45pm; July 21 (Monday), 2014
 LOCATION: Silver Room
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0. Multidimensional Detective - the Blessings of Dimensionality
 Prof. Alfred Inselberg
 School of Mathematical Sciences, Tel Aviv University, Israel;
 Senior Fellow, San Diego Supercomputing Center; Inventor of the
 multidimensional system of Parallel Coordinates and author of
 textbook "Parallel Coordinates: VISUAL Multidimensional Geometry"
 (praised by Stephen Hawking among others.)
 Date & Time: 05:45pm; July 22 (Tuesday), 2014
 LOCATION: Ballroom 1
0. Agents at High Seas
 Dr. Henry Hexmoor
 Associate Professor, Department of Computer Science, Southern
 Illinois University, Illinois, USA; Senior Member, IEEE.
 Date & Time: 06:00pm; July 22 (Tuesday), 2014
 LOCATION: Ballroom 2
0. First Programming Language in CS Education - The Argument For Scala
 Prof. Mark C. Lewis
 Trinity University, Texas, USA
 (Author of "Introduction to the Art of Programming Using Scala").
 Date & Time: 05:45pm; July 22 (Tuesday), 2014
 LOCATION: Ballroom 3
0. The Use of ICT to Mitigate Income Inequality
 Darren Gudmundson
 Income-Inequality.com, Canada; (Also a Project Manager, Business
 Transformation and Technology, Innovation Energy & Mines, Government
 of Manitoba, Canada.)
 Date & Time: 05:45pm; July 22 (Tuesday), 2014
 LOCATION: Ballroom 5

0. Using Weka to Mine Temporal Work Patterns of Programming Students
Dr. Dale E. Parson
Kutztown University of Pennsylvania, Kutztown, Pennsylvania, USA
Date & Time: 02:00pm - 3:00pm; July 22 (Tuesday), 2014
LOCATION: Ballroom 3

0. Recommendation Systems for Big Data
Prof. Samee U. Khan and Muhammad Usman Shahid Khan
North Dakota State University, USA
Date & Time: 06:00pm; July 23 (Wednesday), 2014
LOCATION: Ballroom 3

0. Fault Tolerance and Beyond
Prof. Igor Schagaev
Professor of Computer Science, London Metropolitan University, UK;
Research Advisor to ITACS Ltd, UK
Date & Time: 06:00pm; July 23 (Wednesday), 2014
LOCATION: Ballroom 2

0. Actor Parallelism and Akka/Scala
Prof. Mark C. Lewis
Trinity University, Texas, USA
(Author of "Introduction to the Art of Programming Using Scala").
Date & Time: 06:00pm; July 23 (Wednesday), 2014
LOCATION: Ballroom 4

0. Hacking with Kali Linux
Prof. George Markowsky
Professor of Computer Science and Associate Director of the School
of Computing and Information Science, Cybersecurity Lab, University
of Maine, Orono, Maine, USA; Visiting Scholar, Department of Computing
Security, Rochester Institute of Technology, Rochester, New York, USA.
Date & Time: 06:00pm; July 23 (Wednesday), 2014
LOCATION: Ballroom 5

0. Cloud Computing for Big Data Challenges (Cloud Architectures and
Big Data Tools)
Mehdi Bahrami
IEEE Senior Member; Senior Software Analyst, Lian Processor Co.;
Cloud Lab, Electrical Engineering and Computer Science Department,
University of California, Merced, California, USA
Date & Time: 05:45pm; July 23 (Wednesday), 2014
LOCATION: Gold Room

0. Smartphone Sensor Mining Applications: Ubiquitous Possibilities
Dr. Gary Weiss
Director, Wireless Sensor Data Mining (WISDM) Lab.; Department of
Computer and Information Science, Fordham University in New York
City, New York, USA
Date & Time: 05:40pm; July 23 (Wednesday), 2014
LOCATION: Ballroom 1

ABDA'14 & ICOMP'14 & GCA'14 CONFERENCE **SCHEDULES**

**The 2014 International Conference on
Advances in Big Data Analytics (ABDA'14)**

+

**The 2014 International Conference on
Internet Computing and Big Data (ICOMP'14)**

+

**The 2014 International Conference on
Grid & Cloud Computing and Applications (GCA'14)**

Because of partial topical and technical overlap between ABDA'14, ICOMP'14, & GCA'14, the schedule of these conferences are merged into one comprehensive schedule. It is hoped that this would encourage the participants of the three conferences to explore cross-fertilization of ideas. There are also a number of other sessions (not listed as part of these three conferences) that are of potential interest to ABDA'14, ICOMP'14, & GCA'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, sessions in DMIN'14, FECS'14, GEM'14, ICAI'14, IKE'14, and PDPTA conferences discuss topics that are within the scope of ABDA'14, ICOMP'14, & GCA'14; these have been scheduled so that selected ABDA'14, ICOMP'14, & GCA'14 attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:**
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:**
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:**
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:**
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)**
- SESSION 1-ABDA: ALGORITHMS FOR BIG DATA**
XXX Co-Chairs: Dr. Mehran Asadi; Interim Dept. Chair,
The Lincoln University, Pennsylvania, USA;
Dr. Greg Speegle; Baylor University, Waco, Texas, USA
July 21, 2014 (Monday); 01:00pm - 03:00pm
(LOCATION: Copper Room)
- 01:00 - 01:20pm: On Walsh-Fourier Bispectral Analysis**
M. M. Gabr, G. S. Sabbah, M. El-Hashash
Faculty of Science, Alexandria University, Egypt;
Bridgewater State University, Bridgewater, Massachusetts, USA
- 01:20 - 01:40pm: Noise Benefits In Convolutional Neural Networks**
Kartik Audhkhasi, Osonde Osoba, Bart Kosko
Signal and Image Processing Institute, EE Department,
University of Southern California, Los Angeles, California, USA
- 01:40 - 02:00pm: Research of Decision Tree on YARN Using MapReduce and Spark**
Hua Wang, Bin Wu, Shuai Yang, Bai Wang
Beijing University of Posts and Telecommunications, P. R. China

- 02:00 - 02:20pm: Kernel Approach to Incomplete Data Analysis (KAIDA)
S. Y. Kung, Pei-Yuan Wu
Professor of Department of Electrical Engineering,
Princeton University, USA
- 02:20 - 02:40pm: On the Usage of Sorting Networks to Big Data
Blanca Lopez, Nareli Cruz-Cortes
Instituto Politecnico Nacional (CIC-IPN), Mexico
- 02:40 - 03:00pm: XXX Big Data Architecture for Large-scale Scientific Computing
Benoit Lange, Toan Nguyen
Project OPALE, INRIA Grenoble, Sant-Ismier, France
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-ABDA-ICOMP-GCA
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**
- 0. The Use of Fully Homomorphic Encryption in Data Mining with Privacy Preserving
Laecio Araujo Costa, Ruy Jose Guerra Barreto De Queiroz
Instituto Federal do Sertao Pernambucano - IFSertao, Brazil;
Universidade Federal do Pernambuco - UFPE, Brazil
 - 0. An Empirical Approach to Identifying the Friendships on Social Network Users
Kuan-Hsi Chen, Yuh-Jyh Hu, Tyne Liang, Kiwing To
National Chiao Tung University, Taiwan, R.O.C.;
Institute of Physics, Academia Sinica, Taipei, Taiwan, R.O.C.
 - 0. ...
- SESSION 2-ICOMP: CLOUD COMPUTING + WEB SERVICES + WEB APPLICATIONS + SYSTEM INFRASTRUCTURES & ENHANCED CACHE METHODS
XXX Co-Chairs: Prof. Lan Yang; California State Polytechnic University, Pomona, CA, USA;
Mehdi Bahrami; Cloud Lab, University of California, Merced, CA, USA
XXX July 21, 2014 (Monday); 03:40pm - 06:00pm
(LOCATION: Copper Room)**
- 03:40 - 04:00pm: Design and Development of a System for Data Capture in a Monitoring and Evaluation Environment
Patrick Otoo Bobbie, Joshua Ronald Opoku Nsiah
Ghana Technology University College, Accra, Ghana
- 04:00 - 04:20pm: NbQ-CLOCK: A Non-blocking Queue-based CLOCK Algorithm for Web-Object Caching
Gage Eads, Juan Colmenares
University of California, Berkeley, California, USA;
Samsung Research America, Silicon Valley, California, USA
- 04:20 - 04:40pm: Design and Deployment of Highly-Scalable Distributed Web Conferencing Systems
Brijesh Kumar, Constantine Katsinis
Rapidsoft Systems Inc., Princeton, New Jersey, USA;
Drexel University, Philadelphia, PA, USA
- 04:40 - 05:00pm: Disambiguating Cloud Security
T. Ray Campbell
Livingstone College, Salisbury, North Carolina, USA

- 05:00 - 05:20pm: Characteristics of Online Social Services Sharing Long Duration Content
Hyewon Lim, Taewhi Lee, Namyoon Kim, Sang-goo Lee, and Hyoung-Joo Kim
Seoul National University, Seoul, Republic of Korea, South Korea; BigData Software Platform Research Department, Electronics and Telecommunications Research Institute (ETRI), Daejeon, Republic of Korea, South Korea
- 05:20 - 05:40pm: Correlation and Regression Models to Assess the Usability of the Web Pages
Saad Subair, Husaa Alessa
Princess Nora Bint Abdulrahman University, Riyadh, Kingdom of Saudi Arabia; King Abdulaziz City for Science and Technology, Riyadh, Kingdom of Saudi Arabia
- 05:40 - 06:00pm: XXX Building Blocks: Web Standards as Standard Resources in Robotics
Sekou Remy
School of Computing, Clemson University, South Carolina, USA
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)**
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 3-GCA: CLOUD COMPUTING & Grid + RELATED ISSUES
 XXX Co-Chairs: Dr. Mehran Asadi; Interim Dept. Chair,
 The Lincoln University, Pennsylvania, USA;
 Felix Njeh; Bowie State University, Bowie, Maryland, USA
 July 22, 2014 (Tuesday); 08:00am - 10:20am
 (LOCATION: Copper Room)

08:00 - 08:20am: XXX The Cloud Computing Adoption Model (CCAM)
 Felix Njeh, Bo Yang
 Bowie State University, Bowie, Maryland, USA

08:20 - 08:40am: Exploring Security and Privacy Risks of SoA Solutions
 Deployed on the Cloud
 Abdullah Abuhussein, Harkeerat Bedi, Sajjan Shiva
 The University of Memphis, Memphis, USA

08:40 - 09:00am: A Highly Available Generic Billing Architecture for
 Heterogenous Mobile Cloud Services
 Piyush Harsh, Konstantin Benz, Irena Trajkovska, Andy Edmonds,
 Paolo Maria Comi, Thomas Michael Bohnert
 Zurich University of Applied Sciences, Switzerland;
 Universidad Politcnica de Madrid, Spain
 Italtel S.p.A. Innovation & Research, Milan, Italy

09:00 - 09:20am: Host Load Prediction-based GMDH-EA and MMTP for Virtual
 Machines Load Balancing in Cloud Environment
 Chenglei Peng, Qiangpeng Yang, Yao Yu, Yu Zhou,
 Ziqiang Wang, Sidan Du
 Nanjing University, Nanjing, P. R. China

09:20 - 09:40am: SLA-Based Optimal Provisioning Method for Cloud Computing
 Environments
 Seunghwan Yoo, Sungchun Kim
 Sogang University, Seoul, South Korea

09:40 - 10:00am: DiAF: A Dynamic Virtual Appliance Provision and Management
 Framework for Cloud Computing
 Rajendar Kandan, Mohamad Zakaria Alli, Hong Ong
 Advanced Computing Lab, MIMOS, Malaysia

10:00 - 10:20am: A Framework for Selecting Cloud Service Provider Based on
 Service Level Agreement Assurance
 Radwa El-Awadi, Mohamed Esam, Mohamed Abu Rizka, and
 Abd El-Fattah Hegazi
 Sadat Academy for Management Sciences, Egypt; Arab Academy
 for Science and Technology, Egypt; EMC Company, Cairo, Egypt

10:20 - 10:40am: BREAK

SESSION 4-ABDA: SECURITY & PRIVACY IN THE ERA OF BIG DATA & RISK ANALYSIS
XXX + APPLICATIONS OF BIG DATA & SOFTWARE TOOLS + SOCIAL NETWORKS
 XXX Co-Chairs: Prof. Lan Yang; California State Polytechnic University,
 Pomona, CA, USA;
 Dr. Muazzam A. Khan Khattak, National University of Science
 & Technology, Islamabad, Pakistan
 July 22, 2014 (Tuesday); 10:40am - 12:40pm
 (LOCATION: Copper Room)

10:40 - 11:00am: Some Risk Measures and Their Applications in Financial Data Analysis
 H. Haidar, B. Minsky, Q. Tang, R. Thapar, D. Yan, L. Zhang
 University of Leicester, Leicester, UK; Sussex University, Brighton,
 UK; Solo Capital Partners LLP, London, UK

- 11:00 - 11:20am: Secure Outsourcing Multiparty Computation on Lattice-based Encrypted Cloud Data under Multiple Keys
Yi Sun, Qiaoyan Wen, Hua Zhang, Zhengping Jin
State Key Laboratory of Networking and Switching Technology, Beijing University of Posts and Telecommunications, Beijing, P. R. China
- 11:20 - 11:40am: Application-Agnostic Streaming Bayesian Inference via Apache Storm
Todd Wasson, Ana Paula De Oliveira Sales
Data Analytics and Decision Sciences, Lawrence Livermore National Laboratory, Livermore, California, USA
- 11:40 - 12:00pm: Multicore Construction of k-d Trees for High Dimensional Point Data
Victor Lu, John C. Hart
University of Illinois at Urbana Champaign, Illinois, USA
- 12:00 - 12:20pm: ARIANA: Adaptive Robust and Integrative Analysis for Finding Novel Associations
Vida Abedi, Mohammed Yeasin, Ramin Zand
Memphis University, Memphis, Tennessee, USA; Department of Neurology University of Tennessee Health Science Center, Tennessee, USA
- 12:20 - 12:40pm: XXX Using Influence for Navigation in Online Social Networks
Bastien Lebayle, Mehran Asadi, Afrand Agah
Department of Computer Science, West Chester University, PA, USA; Department of Business and Entrepreneurial Studies, The Lincoln University, PA, USA
- 12:40 - 01:20pm: **LUNCH (On Your Own)**
- SESSION 5-ICOMP: COMMUNICATION SYSTEMS & TOPOLOGIES + APPLICATIONS & RELATED ISSUES + SOCIAL NETWORKS**
XXX Chair: Dr. Muazzam A. Khan Khattak, National University of Science & Technology, Islamabad, Pakistan
July 22, 2014 (Tuesday); 01:20pm - 03:00pm
(LOCATION: Copper Room)
- 01:20 - 01:40pm: Construction and Verification of SNS Which Used the Japanese Historical Government System
Hideaki Hashimoto, Takayuki Fujimoto
Graduate School of Engineering, Toyo University, Japan
- 01:40 - 02:00pm: Efficient Assignment of Packet Cache Region for Traffic Reduction of Multiple Redundant Contents
Yuki Otaka, Akiko Narita
Graduate School of Science and Technology, Hirosaki University, Japan
- 02:00 - 02:20pm: SIP over IP VPN: Performance Analysis
Aria Asadi Eskandar, Mahbubur R. Syed
Minnesota State University, Mankato, Minnesota, USA
- 02:20 - 02:40pm: Modeling of Open Network Reliability Including the Internet Based on the Theory of Percolation in Two-Dimensional and Three-Dimensional Regular and Random Network Structures
Dmitry Zhukov, Sergey Lesko, Dmitry Lobanov
Moscow State University of Instrument Engineering and Computer Science, Moscow, Russia; National University of Science and Technology "MISIS", Moscow, Russia
- 02:40 - 03:00pm: Mathematical Model of Service Quality Performance's Computing of Multiservice Network
Gulfarida Tulemissova
International Academy of Business, Almaty, Kazakhstan

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-ABDA-ICOMP-GCA
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)

0. A Big-Data Analytical Application for China's Largest Social Media Platform (Weibo)
 Wenyu Dou, Man Chen
 Professor of Marketing, College of Business, City University of Hong Kong, Hong Kong; Zhongnan University of Economics and Law, City University of Hong Kong, Hong Kong

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03:40 - 04:20pm: GENERAL - INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)

04:20 - 06:00pm: GENERAL - PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 6-GCA: PERVASIVE COMPUTING, CLOUD COMPUTING, ANALYSIS, & PERFORMANCE EVALUATION + BIG DATA
XXX Co-Chairs: Dr. Rajni Goel; Professor & Dept. Chair, Howard University, Washington, DC, USA;
Assem Abdel Hamed Mousa; E-Commerce Technical Support Systems Manager, Cairo, Egypt
July 23, 2014 (Wednesday); 08:00am - 10:20am
(LOCATION: Copper Room)

08:00 - 08:20am: Cloud Computing
 Assem Abdel Hamed Mousa
 Ecommerce Technical Support Systems Manager, Cairo, Egypt

08:20 - 08:40am: Ubiquitous, Pervasive Computing
 Assem Abdel Hamed Mousa
 Ecommerce Technical Support Systems Manager, Cairo, Egypt

08:40 - 09:00am: Cyber Analysis Grids for Asynchronous Distributed Cloud Services
 R. William Maule
 Naval Postgraduate School, Monterey, California, USA

09:00 - 09:20am: XXX FREE SLOT

09:20 - 09:40am: Surveying Trust in the Cloud
 Rajni Goel, James Nies, Moses Garuba
 Howard University, Washington, DC, USA

09:40 - 10:00am: Cloud Computing Benchmarks: A Survey
 Carlos Vazquez, Ram Krishnan, Eugene John
 The University of Texas at San Antonio, Texas, USA

10:00 - 10:20am: Big Parameter Data Analysis for Semi-conductor Manufacture
 Jain-Shing Wu, Ming-Chun Tsai, Sheng-Wei Chu, Chung-Nan Lee
 National Sun Yat-sen University, Kaohsiung, Taiwan, R.O.C.

10:20 - 10:40am: BREAK

SESSION 7-ABDA: BIG DATA MANAGEMENT & FRAMEWORKS + BIG DATA PROGRAMMING
XXX Co-Chairs: Dr. Vida Abedi; University of Memphis, Tennessee, USA;
Dr. Fabian Garcia Nocetti; Universidad Nacional Autonoma de Mexico, Mexico
July 23, 2014 (Wednesday); 10:40am - 12:40pm
(LOCATION: Copper Room)

10:40 - 11:00am: Design and Implementation of a Cloud-Based Big Data Programming Service
 Yen-Yu Lin, Xuan-Yi Lin, Jiazheng Zhou, Hsing-Chang Chou, and Yeh-Ching Chung
 National Tsing Hua University, Taiwan, R.O.C.

11:00 - 11:20am: Real-Time Data/Information Storage and Retrieval in Autonomous AI Systems
 James A. Crowder, John Carbone
 Raytheon Intelligence, Information, & Services, Colorado, USA

11:20 - 11:40am: Transparency and Efficiency in Grid Computing for Big Data
 Paul L. Bergstein
 University of Massachusetts Dartmouth, Massachusetts, USA

- 11:40 - 12:00pm: Integration of Big Data Components for NoSQL Problems
Greg Speegle, Erich Baker
Baylor University, Waco, Texas, USA
- 12:00 - 12:20pm: Big Data System Design for Digital Library Middleware
Behrooz Seyed-Abbassi, Chris Jerome Carey
School of Computing, University of North Florida, Florida, USA
- 12:20 - 12:40pm: Comparison and Review of Memory Allocation and File Access
Techniques and Techniques preferred for Distributed Systems
Muazzam A. Khan, Numan Nisar
National University of Sciences and Technology, Pakistan

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

SESSION 8-ABDA: BIG DATA SEARCH & MINING METHODS
XXX Co-Chairs: Prof. Andrew H. Sung; University of Southern Mississippi, USA;
Dr. Vida Abedi; University of Memphis, Tennessee, USA
July 23, 2014 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Copper Room)

- 01:20 - 01:40pm: MPMG: A Mixed Parallel Big Graph Mining Tool
Ma Pengjiang, Wu Bin, Liu Yang, Wang Hongxu
Beijing University of Posts and Telecommunications,
Beijing, P. R. China
- 01:40 - 02:00pm: Decomposition of Inverted Lists and Word Labeling: A New
Index Structure for Text Search
Yangjun Chen, Weixin Shen
University of Winnipeg, Canada
- 02:00 - 02:20pm: Finding Critical Samples for Mining Big Data
Andrew H. Sung, Bernardete M. Ribeiro, Qingzhong Liu, and
Divya Suryakumar
University of Southern Mississippi, Mississippi, USA; University
of Coimbra, Portugal; Sam Houston State University, Texas, USA;
Apple, Inc., USA
- 02:20 - 02:40pm: Spatial Association Mining of Focal Events in Cloud Computing
Sang Jun Park, Jin Soung Yoo
Indiana University-Purdue University, Fort Wayne, Indiana, USA
- 02:40 - 03:00pm: Spectrum Recognition in Large-Scale Cognitive Radio Networks
With Spectral Data Mining
Adam L. Anderson, C. Brett Witherspoon, Behnaz Papari
Tennessee Tech University, Cookeville, Tennessee, USA
- 03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION C-ABDA-ICOMP-GCA**
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)
0. Comparison of System Monitoring Tools for Large Cluster System
Sung-Jun Kim, Joon Woo
Supercomputing Center, Korea Institute of Science and
Technology Information (KISTI), South Korea
0. ...

- SESSION 9-ICOMP: BIG DATA, DATA MANAGEMENT & STORAGE + XML + PRIVACY ISSUES + APPLICATIONS**
Chairs: TBA
July 23, 2014 (Wednesday); 03:40pm - 05:40pm
(LOCATION: Copper Room)
- 03:40 - 04:00pm: Weighted Semantic PageRank Using RDF Metadata on Hadoop
 Hee-Gook Jun, Woo-Hyun Lee, Dong-Hyuk Im, Sang-Goo Lee, and Hyung-Joo Kim
 Seoul National University; Hoseo University, Korea
- 04:00 - 04:20pm: Big Data Analytics Framework for Improved Decision Making
 Brian Xu, Sathish Alampalayam Kumar
 Honeywell Aerospace, Minnesota, USA;
 Coastal Carolina University, South Carolina, USA
- 04:20 - 04:40pm: Anonymization Infrastructure for Secondary Use of Data
 Yuichi Nakamura, Kanae Matsui, Hiroaki Nishi
 Graduate School of Science & Technology, Keio University, Japan
- 04:40 - 05:00pm: A Low-cost Infrastructure for Massive Storage of Phenotype Data for Dairy Cattle Genetic Improvement Programs
 Wagner Arbex, Caio Dos Santos Borsato De Carvalho, Katia Santos, Vinicius Campista Brum, Marcos Vinicius Barbosa Da Silva
 Brazilian Agricultural Research Corporation - Embrapa, Brazil;
 Federal University of Juiz de Fora - UFJF, Brazil
- 05:00 - 05:20pm: Big Data Anonymization Method for Demand Response Services
 Kengo Okada, Hiroaki Nishi
 Graduate School of Science and Technology, Keio University, Japan
- 05:20 - 05:40pm: Determining Human-Perceived Level of Safety in Transportation Systems Using Big Data Analytics
 Carlos E. Otero, Marco Rossi, Adrian Peter, Rana Haber
 Florida Institute of Technology, Melbourne, Florida, USA
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the beginning of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 10-ABDA: APPLICATIONS OF BIG DATA + SOFTWARE TOOLS

**XXX Co-Chairs: Dr. Adam L. Anderson; Tennessee Tech University, USA;
Dr. Chun-Kit Ngan; The Pennsylvania State University, USA;
Prof. Mary Yang; University of Arkansas Little Rock, USA**
July 24, 2014 (Thursday); 08:00am - 10:20am
(LOCATION: Copper Room)

**08:00 - 08:20am: A Software Toolkit for Stock Data Analysis Using Social
Network Analysis Approach**
Junyan Zhang, Donglei Du, Weichang Du
University of New Brunswick, New Brunswick, Canada

08:20 - 08:40am: Querying Clusters of Biological Sequences
Vicente Molieri, Lina Karam, Zoe Lacroix
Arizona State University, Tempe, Arizona, USA

**08:40 - 09:00am: A Visual Decision-Guided Analytics Tool for Finding the
Viable Shortest Path over Geospatiotemporal Data**
Chun-Kit Ngan
Engineering and Information Science Division, Great Valley
School of Graduate Professional Studies, The Pennsylvania
State University, Malvern, Pennsylvania, USA

**09:00 - 09:20am: XXX Exploring Big Data Analysis Using Integrative Systems Biology
Approaches for Kidney Renal Clear Cell Carcinoma Studies**
W. Yang, K. Yoshigoe, X. Qin, A. K. Dunker, J. Y. Yang, Y. Deng,
J. S. Liu, W. Tong, A. Niemierko, Y. Liu, Z. Chen, L. Wang, D. Xu,
H. R. Arabnia, M. Q. Yang
University of Arkansas at Little Rock, Arkansas, USA; Human Genome
Sequencing Center, Baylor College of Medicine, Texas, USA;
Indiana University School of Medicine, Indiana, USA; Indiana
University School of Public Health, Bloomington, Indiana, USA;
Division of Biostatistics and Biomathematics, Department of
Radiation Oncology, Massachusetts General Hospital and Harvard
Medical School Boston, Massachusetts, USA; Clemson University,
South Carolina, USA; Rush University Cancer Center, Rush
University, Chicago, Illinois, USA; University of Missouri,
Columbia, Missouri, USA; Department of Statistics, Harvard
University, Cambridge, Massachusetts, USA; University of
Georgia, Georgia, USA; National Center for Toxicological Research,
US Food and Drug Administration (FDA), Jefferson, Arkansas, USA

09:20 - 09:40am: XXX Graph Database for Agent Based Emergency Response Model
Safiye Sencer, Kutlu Eren
Sakarya University, Sakarya, Turkey

09:40 - 10:00am: Sentiment Analysis for Mobile SNS Data
Bong-Hyun Back, Ilkyu Ha, Byoungchul Ahn
Yeungnam University, South Korea

**10:00 - 10:20am: Estimating the Visit and Content Association of Websites with
their Weblogs**
Hyun-Ho Lee, Jong-Min Lee, Nam-Hun Park, Won-Suk Lee
Yeonsung University, South Korea; Hanyang University, South Korea;
Anyang University, South Korea; Yonsei University, South Korea

10:20 - 10:40am: BREAK

**SESSION 11-ICOMP: MOBILE COMPUTING + BIG DATA, DATA MANAGEMENT & STORAGE
+ XML + PRIVACY ISSUES + APPLICATIONS**

**XXX Chair: Prof. Jinsul Kim; Chonnam National University, South Korea
July 24, 2014 (Thursday); 10:40am - 12:20pm
(LOCATION: Copper Room)**

- 10:40 - 11:00am: A Sensor-Oriented Information System Based on Hadoop Cluster
Yu Liang, Chao Wu
University of Tennessee at Chattanooga, Tennessee, USA
- 11:00 - 11:20am: Investigation into Indexing XML Data Techniques
Alhadi Klaib, Joan Lu
University of Huddersfield, Huddersfield, UK
- 11:20 - 11:40am: Effective Nutrition Label Use on Smartphones
Vladimir Kulyukin, Tanwir Zaman, Sarat Kiran Andhavarapu
Utah State University, Logan, Utah, USA
- 11:40 - 12:00pm: An Investigation into the Problems of User Oriented Interfaces
in Mobile Applications
Ragab Ihnissi, Joan Lu
University of Huddersfield, Huddersfield, West Yorkshire, UK
- 12:00 - 12:20pm: An Efficient Soft-Key Interface Provision Method in Cloud Platform
Sanghyun Park, Jinsul Kim
Chonnam National University, South Korea
- 12:20 - 01:20pm: LUNCH (On Your Own)**

SESSION 12-ABDA: LATE BREAKING & POSITION PAPERS:

**GRAPH ALGORITHMS, ONTOLOGY METHODS, BIG DATA
ARCHITECTURES, SOCIAL NETWORKS, EDUCATION INFRASTRUCTURES**

**XXX Co-Chairs: Prof. Weichang Du; University of New Brunswick, Canada;
Mehdi Bahrami; Cloud Lab, University of California, Merced, USA
July 24, 2014 (Thursday); 01:20pm - 05:00pm
(LOCATION: Copper Room)**

- 01:20 - 01:40pm: MapReduce-Accelerated Framework for Identifying Minimum-Sized
Influential Vertices on Large-Scale Weighted Graphs
Ying Xie, Jing (Selena) He, Vijay V. Raghavan
Kennesaw State University, Kennesaw, Georgia, USA;
University of Louisiana at Lafayette, Lafayette, Louisiana, USA
- 01:40 - 02:00pm: Ontology, The Statistics Model Based on Qualitative Approach ...
Geonchul Shin, Guihyun Baek, Seongchan Park, Hongki Ahn, and
Sukyoung Kim
University of National Hanbat, Daejeon, South Korea
- 02:00 - 02:20pm: XXX Semantic Indexing of Big Data Using a Hierarchical,
Multidimensional Scheme
Ronald J. Wroblewski
Spawar Systems Center Pacific, San Diego, California, USA
- 02:20 - 02:40pm: Social Event Radar (SERv2.0): Efficient Dynamic Adjustment
Mechanism of Distributed Web Crawlers in Social Networks
XXX Tsun Ku, Cheng-Hung Tsai, Ping-Yen Yang, Ming-Jen Chen
Institute for Information Industry, Innovative DigiTech-Enabled
Applications & Service Institute, Taipei, Taiwan, R.O.C.
- 02:40 - 03:00pm: Lessons Learned: Building a Big Data Research and Education
Infrastructure
G. Hsieh, R. Sye, S. Vincent, W. Hendricks
Norfolk State University, Virginia, USA

- 03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION D-ABDA-ICOMP-GCA**
July 24, 2014 (Thursday)
(LOCATION: Hallways of Ballrooms 1-5)
- SESSION 12-ABDA: **Continued ... LATE BREAKING & POSITION PAPERS:**
GRAPH ALGORITHMS, ONTOLOGY METHODS, BIG DATA
ARCHITECTURES, SOCIAL NETWORKS, EDUCATION INFRASTRUCTURES
(LOCATION: Copper Room)
- 03:40 - 04:00pm: Big Data Veracity in Healthcare
Joseph M. Woodside
Stetson University, DeLand, Florida, USA
- 04:00 - 04:20pm: Big Data System Design for Digital Library Middleware
Behrooz Seyed-Abbassi, Chris Jerome Carey
University of North Florida, Jacksonville, Florida, USA
- 04:20 - 04:40pm: Analysis of Technology Trend Gap Based on Ontology Between
Professional and General Public
Geonchul Shin, Guihyun Baek, Haeim Jeong, Sukyoung Kim
University of National Hanbat, Daejeon, South Korea;
Future Research Creative Laboratory, ETRI, South Korea
- 04:40 - 05:00pm: Blur Detection For Video Streams In The Compressed Domain
Zhenyu Wu, Daiying Zhou, Hong Hu
University of Electronic Science and Technology of China,
P. R. China; Huawei Technologies Co. Ltd, P. R. China
- 05:00 - 05:20pm: FREE SLOT

BIOCOMP'14 CONFERENCE SCHEDULE

The 2014 International Conference on Bioinformatics & Computational Biology

There are a number of other sessions (not listed as part of BIOCOMP in this schedule) that are of potential interest to BIOCOMP participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, some sessions in ABDA'14, ICOMP'14, PDPTA'14, DMIN'14, ICAI'14, and IKE'14 conferences discuss topics that are within the scope of BIOCOMP'14; these have been scheduled so that selected BIOCOMP groups/attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)
- 01:00 - 03:00pm: During this period, BIOCOMP attendees are encouraged to participate
in sessions belonging to ABDA'14, ICOMP'14, PDPTA'14, DMIN'14,
ICAI'14, or IKE'14 conferences. These sessions discuss topics that
significantly overlap the scope of BIOCOMP.
- 03:00 - 03:20pm: BREAK
- SESSION 1-BIOCOMP: GENE EXPRESSION & REPRESENTATION, MICROARRAY, SEQUENCING,
ALIGNMENT, & RELATED BIOINFORMATICS ISSUES
XXX Co-Chairs: Prof. Steven M. Carr; Terra Nova Genomics, Inc.,
St John's, Canada;
Prof. Zhong-Hui Duan; University of Akron, Ohio, USA
July 21, 2014 (Monday); 03:20pm - 06:00pm
(LOCATION: Platinum Room)
- 03:20 - 03:40pm: Relevance of Information in Cell Signaling Pathways Using
Default Logic
Andrei Doncescu, Pierre Siegel, Tan Le
University of Toulouse, CNRS, LAAS, Toulouse, France;
University of Aix Marseille, CNRS, Marseille, France

- 03:40 - 04:00pm: A Comparative Analysis of Computational Indel Calling Pipelines for Next Generation Sequencing Data
Jacob Porter, Jonathan Berkhahn, Liqing Zhang
Virginia Tech, Blacksburg, Virginia, USA;
IBM, San Jose, California, USA
- 04:00 - 04:20pm: A Hybrid Clustering Algorithm For Gene Expression Data
Mohammad Shabbir Hasan, Zhong-Hui Duan
The University of Akron, Akron, Ohio, USA
- 04:20 - 04:40pm: An Algorithmic and Computational Analysis of Open Reading Frames in Short dsDNA Sequences: Evaluation of "Carr's Conjecture"
Steven M. Carr, Donald Craig, H. Todd Wareham
Memorial University of Newfoundland, Canada;
Terra Nova Genomics, Inc., St John's, Canada
- 04:40 - 05:00pm: Gene Expression Profile Classification in Random Feature Space
Xiyi Hang
California State University, Northridge, California, USA
- 05:00 - 05:20pm: Grid Computing-based Sequence Alignment
Mohamed Shalaby, Yasser Kamal
Modern University for Information and Technology, Cairo, Egypt;
Giza Higher Institute of Engineering & Technology, Egypt
- 05:20 - 05:40pm: Bioinformatic Structure and Biophotonic Algorithm of the Brain
Boucherit Taieb, Yagoubi Abdelkader, Lalam Abdelkhalek,
and Boucherit Mounir
Boucherit Laboratory, Oran, Algeria
- 05:40 - 06:00pm: Biophotonic Algorithm of DNA, Biophotonic Language of DNA
Boucherit Taieb, Yagoubi Abdelkader
Boucherit Laboratory, Oran, Algeria
- 06:00 - 09:00pm: **TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the begining of this book for details)
- 09:00 - 11:45pm: **CONFERENCE RECEPTION DINNER / SOCIAL**
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:00 - 10:40am: During this period, BIOCOMP attendees are encouraged to participate in sessions belonging to ABDA'14, ICOMP'14, PDPTA'14, DMIN'14, ICAI'14, or IKE'14 conferences. These sessions discuss topics that significantly overlap the scope of BIOCOMP.**
- SESSION 4-ABDA: SECURITY & PRIVACY IN THE ERA OF BIG DATA & RISK ANALYSIS
XXX + APPLICATIONS OF BIG DATA & SOFTWARE TOOLS + SOCIAL NETWORKS
XXX Co-Chairs: Prof. Lan Yang; California State Polytechnic University,
Pomona, CA, USA;
Dr. Muazzam A. Khan Khattak, National University of Science
& Technology, Islamabad, Pakistan
July 22, 2014 (Tuesday); 10:40am - 12:40pm
(LOCATION: Copper Room)**
- 10:40 - 11:00am: Some Risk Measures and Their Applications in Financial Data Analysis
H. Haidar, B. Minsky, Q. Tang, R. Thapar, D. Yan, L. Zhang
University of Leicester, Leicester, UK; Sussex University, Brighton,
UK; Solo Capital Partners LLP, London, UK**
- 11:00 - 11:20am: Secure Outsourcing Multiparty Computation on Lattice-based
Encrypted Cloud Data under Multiple Keys
Yi Sun, Qiaoyan Wen, Hua Zhang, Zhengping Jin
State Key Laboratory of Networking and Switching Technology, Beijing
University of Posts and Telecommunications, Beijing, P. R. China**
- 11:20 - 11:40am: Application-Agnostic Streaming Bayesian Inference via Apache Storm
Todd Wasson, Ana Paula De Oliveira Sales
Data Analytics and Decision Sciences, Lawrence Livermore National
Laboratory, Livermore, California, USA**
- 11:40 - 12:00pm: Multicore Construction of k-d Trees for High Dimensional Point Data
Victor Lu, John C. Hart
University of Illinois at Urbana Champaign, Illinois, USA**
- 12:00 - 12:20pm: ARIANA: Adaptive Robust and Integrative Analysis for Finding
Novel Associations
Vida Abedi, Mohammed Yeasin, Ramin Zand
Memphis University, Memphis, Tennessee, USA; Department of Neurology
University of Tennessee Health Science Center, Tennessee, USA**
- 12:20 - 01:00pm: LUNCH (On Your Own)**
- SESSION 2-BIOCOMP: COMPUTATIONAL BIOLOGY & MEDICAL APPLICATIONS + HEALTH
INFORMATICS, DATA MINING + PROTEIN FOLDING
XXX Co-Chairs: Dr. Vinit Kantabutra; Idaho State University, Idaho, USA;
Dr. Otto Dobretsberger; University of Houston, Texas, USA
July 22, 2014 (Tuesday); 01:00pm - 03:00pm
(LOCATION: Platinum Room)**
- 01:00 - 01:20pm: Determining Biological Trends Using Machine Learning Techniques
Regie Felix, Ambuj Singh, Nazli Dereli, Petko Bogdanov,
Nick Beck, Sophie D'Arcy, Sky Adams
University of California, Santa Barbara, California, USA;
CSU, San Bernardino, USA**
- 01:20 - 01:40pm: Model of Diagnosis Knowledge Base Ontology Framework Based on
Clinical Practice Guidelines
Hala Almutair, Samir El-Masri
King Saud University, Saudi Arabia;
Imam Mohammad bin Saud University, Saudi Arabia**

- 01:40 - 02:00pm: Intentionally-Linked Entities: A Database System for Health Care Informatics
Vitit Kantabutra
Idaho State University, Pocatello, Idaho, USA
- 02:00 - 02:20pm: Blood Vessel Detection in Images from Laser-Heated Skin
Alireza Kavianpour, Simin Shoari, Behdad Kavianpour
DeVry University, Pomona, California, USA
- 02:20 - 02:40pm: Discovering Association Rules and Classification for Biological Data using Data Mining Methods
John Tsiligaridis, Michael Pagela
Heritage University, Toppenish, Washington, USA
- 02:40 - 03:00pm: SMIR: A Method to Predict the Residues Involved in the Core of a Protein
Ruben Acuna, Zoe Lacroix, Jacques Chomilier, Nikolaos Papandreou
Arizona State University, Tempe, Arizona, USA;
University Pierre et Marie Curie, Paris, France;
Agricultural University of Athens, Athens, Greece;
Universite Paris Diderot, Paris, France

**03:00 - 03:40pm: POSTER/DISCUSSION SESSION A-BIOCOMP
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)**

- 0. KBase: An Integrated Knowledge-base for Predictive Biology and Environmental Research
Anthony V. Palumbo, et al.
Oak Ridge National Laboratory, USA
- 0. Complex Networks Associated with Positive Selection and Drug Resistance in the Malaria Parasite
Timothy G. Lilburn, Hong Cai, Yufeng Wang
American Type Culture Collection, Manassas, Virginia, USA;
South Texas Center for Emerging Infectious Diseases, University of Texas at San Antonio, Texas, USA
- 0. Mining Structural Databases to Predict Catalytic Promiscuity Revealed Two Novel Ene-reductases
Georg Steinkellner, et al.
ACIB GmbH, Graz, Austria
- 0. Multivariate Point Cloud Comparator: Searching Different Proteins for Similar Enzymatic Activity
Jurgen Stradner, Christian Gruber, Georg Steinkellner, Karl Gruber
ACIB GmbH, Graz, Austria; University of Graz, Austria
- 0. ...

**SESSION 3-BIOCOMP: HEALTH INFORMATICS, HEALTH CARE, & MEDICAL APPLICATIONS
Chairs: TBA
July 22, 2014 (Tuesday); 03:40pm - 06:00pm
(LOCATION: Platinum Room)**

- 03:40 - 04:00pm: Proposal of Smart Blood Banks Central Distribution System in Saudi Arabia
Albatoul Althenyan, Samir El-Masri
Imam Muhammad Bin Saud University, Saudi Arabia;
King Saud University, Saudi Arabia

- 04:00 - 04:20pm: XXX FREE SLOT
- 04:20 - 04:40pm: XXX FREE SLOT
- 04:40 - 05:00pm: XXX FREE SLOT
- 05:00 - 05:20pm: Biomechanical Evaluation for Fibular Allograft Combined with Impaction Bone Grafting in Treating the Femoral Head Necrosis: Thorough Debridement or not?
Guangquan Zhou, Xiumin Chen, Zhihui Pang, Yujing Xu, Wei He, Liao Shaoyi Stephen, Qinqun Chen
Guangzhou University of Chinese Medicine, Guangzhou, P. R. China; Guangdong Provincial Hospital of Chinese Medicine, China; University of Science and Technology of China-City, University of Hong Kong Joint Advanced Research Center, City University of Hong Kong, Hong Kong
- 05:20 - 05:40pm: Keratoconus Disease and Three-Dimensional Simulation of the Cornea Throughout the Process of Cross-Linking Treatment
Hilal Kaya, Abdullah Cavusoglu, Hasan Basri Cakmak, Baha Sen, and Elif Calik
Ministry of National Education, Ankara, Turkey; Scientific and Technological Research Council of Turkey, Ankara, Turkey; Yildirim Beyazt University, Ataturk Education and Research Hospital, Ankara, Turkey; Yildirim Beyazt University, Ankara, Turkey; Karabuk University, School of Health Sciences, Karabuk, Turkey
- 05:40 - 06:00pm: Wavelet Packet Based Diagnosis of Sleep Apnea Using ECG Data
Syeda Quratulain Ali, Varun Jeoti, Samir Brahim Belhaouari
Universiti Teknologi Petronas, Malaysia; Alfaisal University, Kingdom of Saudi Arabia
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:00 - 10:40am: During this period, BIOCOMP attendees are encouraged to participate in sessions belonging to ABDA'14, ICOMP'14, PDPTA'14, DMIN'14, ICAI'14, or IKE'14 conferences. These sessions discuss topics that significantly overlap the scope of BIOCOMP.**
- SESSION 7-ABDA: BIG DATA MANAGEMENT & FRAMEWORKS + BIG DATA PROGRAMMING**
XXX Co-Chairs: Dr. Vida Abedi; University of Memphis, Tennessee, USA;
Dr. Fabian Garcia Nocetti; Universidad Nacional Autonoma de Mexico, Mexico
July 23, 2014 (Wednesday); 10:40am - 12:00pm
(LOCATION: Copper Room)
- 10:40 - 11:00am: Design and Implementation of a Cloud-Based Big Data Programming Service**
 Yen-Yu Lin, Xuan-Yi Lin, Jiazheng Zhou, Hsing-Chang Chou, and Yeh-Ching Chung
 National Tsing Hua University, Taiwan, R.O.C.
- 11:00 - 11:20am: Real-Time Data/Information Storage and Retrieval in Autonomous AI Systems**
 James A. Crowder, John Carbone
 Raytheon Intelligence, Information, & Services, Colorado, USA
- 11:20 - 11:40am: Transparency and Efficiency in Grid Computing for Big Data**
 Paul L. Bergstein
 University of Massachusetts Dartmouth, Massachusetts, USA
- 11:40 - 12:00pm: Integration of Big Data Components for NoSQL Problems**
 Greg Speegle, Erich Baker
 Baylor University, Waco, Texas, USA
- 12:00 - 01:00pm: LUNCH (On Your Own)**
- SESSION 4-BIOCOMP: PROTEIN CLASSIFICATION & STRUCTURE PREDICTION, FOLDING, & COMPUTATIONAL STRUCTURAL BIOLOGY + DRUG DESIGN + MACHINE LEARNING, SIGNAL PROCESSING & DATA QUALITY ENHANCEMENT + DATABASES**
XXX Chair (01:00pm - 03:00pm): Dr. Anthony V. Palumbo;
Director, Biosciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA;
XXX Chair (03:40pm - 05:20pm): TBA
July 23, 2014 (Wednesday); 01:00pm - 05:20pm
(LOCATION: Platinum Room)
- 01:00 - 01:20pm: An Efficient Algorithm for Protein-Protein Interaction Network Analysis to Discover Overlapping Functional Modules**
 Ying Liu
 St. John's University, Queens, New York, USA
- 01:20 - 01:40pm: Dynamic Protein-Protein Interaction Networks and the Detection of Protein Complexes: An Overview**
 Eileen Marie Hanna, Nazar Zaki
 United Arab Emirates University, Al-Ain, Abu Dhabi, United Arab Emirates (UAE)
- 01:40 - 02:00pm: Erythritol Promotes Interfacial Stability of GAPDH**
 Norbert W. Seidler, Jane M. Jones
 Kansas City University of Medicine and Biosciences, Kansas City, Missouri, USA; University of Missouri - Kansas City School of Medicine, Kansas City, Missouri, USA

02:00 - 02:20pm: Computational Methods for Protein-Protein Interaction Prediction
Maad Shatnawi, Nazar Zaki
United Arab Emirates University, United Arab Emirates (UAE)

02:20 - 02:40pm: BIOBase: An Adaptable Biometric Tool and Database
Christine Brown, Karl Ricanek, Devon M. Simmonds
University of North Carolina Wilmington, North Carolina, USA

02:40 - 03:00pm: Prediction and Rule Extraction of Major Histocompatibility
Complex Class II Epitopes by Logic Minimization
Clemente Aguilar-Bonavides, Raúl Cruz-Cano, Cristina Lanzas
University of Tennessee, Knoxville, Tennessee, USA; University
of Maryland, College Park, Maryland, USA

**03:00 - 03:40pm: POSTER/DISCUSSION SESSION B-BIOCOMP
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)**

- 0. Large-scale uniform Multivariate Point Cloud Investigator:
Searching for Enzymatic Activity in Structural Space by
Comparing Multivariate Point Clouds
Christian C. Gruber, Jurgen Stradner, Georg Steinkellner,
Hanna Lindermuth, Karl Gruber
ACIB GmbH, Graz, Austria; University of Graz, Austria
- 0. Contour Generation for a Depth Image
U Deok Seo, Ku-Jin Kim
Kyungpook National University, South Korea
- 0. Determination of "Realistic" Thresholds for Cumulative Differences
for Markov Chain Based Sequence Comparison
O. Dobretsberger, G. Golovko, M. Rojas, L. Albayrak, K. Khanipov,
N. Olson, W. Widger, Y. Fofanov
University of Houston, Houston, Texas, USA; University of Texas
Medical Branch (Galveston), Galveston, Texas, USA
- 0. ...

**SESSION 4-BIOCOMP: Continued ... PROTEIN CLASSIFICATION & STRUCTURE PREDICTION,
FOLDING, & COMPUTATIONAL STRUCTURAL BIOLOGY + DRUG DESIGN +
MACHINE LEARNING, SIGNAL PROCESSING & DATA QUALITY ENHANCEMENT
+ DATABASES
(LOCATION: Platinum Room)**

03:40 - 04:00pm: Review of Research on Biological Literature Text Mining
Meijing Kong, Zhang Le
Southwest University, Chongqing, P. R. China; Michigan
Technological University, Houghton, Michigan, USA

04:00 - 04:20pm: XXX FREE SLOT

04:20 - 04:40pm: Automatic EEG Bad Epoch and Artifact Removal Using Clustering
Elizabeth Hames, Mary Baker
Texas Tech University, Lubbock, Texas, USA

04:40 - 05:00pm: Using Composite Digital Data to Improve the Interpretation of
Analog Displays
Robert A. Warner
Tigard Research Institute, Tigard, Oregon, USA

- 05:00 - 05:20pm: BRATUMASS Source Separation: Multi-fractal Analysis for Near-field Microwave Signal Feature
Limin Xiao, Zhifu Tao, Yizhou Yao, Meng Yao, Blair Fleet, Erik D. Goodman, Jinyao Yan, John R. Deller
East China Normal University, Shanghai, P. R. China; Suzhou Vocational University, Suzhou, P. R. China; Shenyang University of Technology, Shenyang, P. R. China; Michigan State University, East Lansing, Michigan, USA
- 05:20 - 06:00pm: **INVITED TALK:**
INTEGRATIVE SYSTEMS BIOLOGY APPROACHES TO IDENTIFY DISRUPTED PATHWAYS IN DISEASE DEVELOPMENT
Mary Qu Yang
Director of the Joint Bioinformatics Ph.D. Program of University of Arkansas Little Rock College of Engineering & Information Technology, University of Arkansas for Medical Sciences, USA
- 06:00 - 09:00pm: **TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the beginning of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

08:00a - 12:40p: During this period, BIOCOMP attendees are encouraged to participate in sessions belonging to ABDA'14, ICOMP'14, PDPTA'14, DMIN'14, ICAI'14, or IKE'14 conferences. These sessions discuss topics that significantly overlap the scope of BIOCOMP.

SESSION 5-BIOCOMP: ONTOLOGY FRAMEWORKS + MICROARRAY DATASETS + MEDICAL SCIENCE, VISUALIZATION, HPC, BIOINFORMATICS
 XXX Chair: Dr. Fabian Garcia Nocetti; Universidad Nacional Autonoma de Mexico, Mexico
 July 24, 2014 (Thursday); 12:40pm - 03:00pm
 (LOCATION: Platinum Room)

NOTE: We anticipate a number of speaker no-shows for this track; this is due to potential delay in obtaining US visa, non registration, ... In cases of no-shows, the presentations can be moved up in order to close time gaps in the session.

- 12:40 - 01:00pm: Treatment Ontology Framework of Clinical Practice Guidelines
 Eman Alqaissi, Samir El-Masri
 King Saud University, Riyadh, Saudi Arabia
- 01:00 - 01:20pm: Investigating the Stability of Housekeeping Genes Using Microarray Datasets
 Fariba Nosrati, Ayse Bener, Asli Uyar
 Ryerson University, Toronto, Canada;
 Okan University, Istanbul, Turkey
- 01:20 - 01:40pm: Optimal Scaling Values For Time-Frequency Distributions in Doppler Ultrasound Blood Flow Measurement
 F. Garcia Nocetti, J. Solano Gonzalez, E. Rubio Acosta
 Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas, Universidad Nacional Autonoma de Mexico, Mexico
- 01:40 - 02:00pm: An Interactive Visualization Tool to Interpret Transcriptomics Data
 Salil Pendse, Patrick D. McMullen
 The Hamner Institutes for Health Sciences, RTP, North Carolina, USA
- 02:00 - 02:20pm: WMS4HPC, a Workflow Management System Bridge for High Performance Computing in Life Science Data Management
 Etienne Z. Gnimpieba, Carol M. Lushbough
 University of South Dakota, South Dakota, USA
- 02:20 - 02:40pm: SBMLChecker, a Semantic Approach for SBML Model Reliability Evaluation
 Mathialakan Thavappiragasam, Carol M. Lushbough, Etienne Z. Gnimpieba
 University of South Dakota, South Dakota, USA
- 02:40 - 03:00pm: Biological System Analysis Using Integrated Bioinformatics Tools: Levels of the Central Dogma in Folate Mediate One-Carbon Metabolism (FOCM)
 Jordy Larson, Etienne Z. Gnimpieba, Abalo Chango, Carol M. Lushbough
 University of South Dakota, South Dakota, USA;
 UPSP EGEAL, Institut Polytechnique LaSalle Beauvais, Beauvais, France

03:00 - 03:40pm: POSTER/DISCUSSION SESSION C-BIOCOMP
July 24, 2014 (Thursday)
(LOCATION: Hallways of Ballrooms 1-5)

- 0. Computation of a Bounding Volume Hierarchy for a Flexible Amino Acid
Yukyeong Kim, Ku-Jin Kim
Kyungpook National University, South Korea
- 0. Bayesian Inference of Epidemic Parameters
Alex Poppinga
University of Auckland, Auckland, New Zealand; Allan Wilson Centre
for Molecular Ecology and Evolution, New Zealand
- 0. A Study of the Integration of Biomedical Devices with Information
Technology Systems with an emphasis on Information Quality
Jim McGinnis
University of Arkansas Fort Smith, USA; University of Arkansas
Little Rock, USA
- 0. Molecular Epidemiology and Characterization of Extremely Drug
Resistant
(XDR) Clinical *Acinetobacter baumannii* Isolates
Sherief El-Shazly, Ali Dashti, Leila Vali, Michael Bolaris, and
Ashraf Ibrahim
Health Sciences Center, Kuwait University, Kuwait; Los Angeles
Biomedical Research Institute at Harbor-UCLA Medical Center,
California, USA
- 0. ...

DMIN'14 CONFERENCE SCHEDULE

The 2014 International Conference on Data Mining

There are a number of other sessions (not listed as part of DMIN'14 in this schedule) that are of potential interest to DMIN'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, some sessions in IKE'14, ICAI'14, ICOMP'14, ABDA'14, GEM'14, and EEE'14 conferences discuss topics that are within the scope of DMIN'14; these have been scheduled so that selected DMIN'14 groups/attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)
- 01:00 - 01:20pm: OPENING REMARKS
Dr. Robert Stahlbock; DMIN 2014 Chair, University of Hamburg, Germany
- SESSION 1-DMIN: WEB, TEXT, MULTIMEDIA MINING
Co-Chairs: Dr. Robert Stahlbock; University of Hamburg, Germany;
Dr. Peter Geczy; National Institute of Advanced Industrial
Science and Technology (AIST), Japan;
Dr. Gary M. Weiss; Fordham University in New York City, USA
July 21, 2014 (Monday); 01:20pm - 04:40pm
(LOCATION: Ballroom 1)
- 01:20 - 01:40pm: Sub-Net Identification for Text Refinement and Text Meaning Discovery
in Social Media Analytics
Gurpreet Bawa, Dinesh Batra, Vivek Anand
Annik Technology Services Pvt. Ltd, India
- 01:40 - 02:00pm: Semi-automatic Metadata Extraction from Scientific Journal Article
for Full-text XML Conversion
Sukyoung Kim, Yoonsung Cho, Inbae Kang, Kihong Ahn
National Hanbat University, Korea

- 02:00 - 02:20pm: The Authorship of Audacity: Data Mining and Stylometric Analysis of Barack Obama Speeches
Jonathan Herz, Abdelghani Bellaachia
George Washington University, Washington, D.C., USA
- 02:20 - 02:40pm: Text Categorization Using Topic Model and Ontology Networks
Yinghao Huang
University of Michigan - Dearborn, Michigan, USA
- 02:40 - 03:00pm: Personalizing Query Refinement Based on Latent Tasks
Chao Xu, Mingzhu Zhu, Yi-fang Wu
New Jersey Institute of Technology, New Jersey, USA
- 03:00 - 03:40pm: BREAK: POSTER & SHORT PAPERS - DISCUSSION SESSION A-DMIN
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**
- 0. Implementation of Artificial Neural Networks in MapReduce Optimization
Changlong Li, Xuehai Zhou, Dong Dai
University of Science and Technology of China, Jiangsu, P. R. China;
University of Science and Technology of China, Anhui, P. R. China;
Texas Tech University, Texas, USA
 - 0. Computational Approach that Allows Clustering of Millions of Genomic Sequences
Levent Albayrak, Georgiy Golovko, Mark Rojas, Kamil Khanipov,
Otto Dobrestberger, Meenakshi Sharma, Yuriy Fofanov
Sealy Center for Structural Biology & Mol Department of Pharmacology &
Toxicology, University of Texas, Medical Branch at Galveston, USA
 - 0. ...
- SESSION 1-DMIN: Continued - WEB, TEXT, MULTIMEDIA MINING
(LOCATION: Ballroom 1)**
- 03:40 - 04:00pm: Positive Unlabeled Learning to Discover Relevant Documents Using Topic Models for Feature Selection
Mingzhu Zhu, Yi-fang Wu
New Jersey Institute of Technology, New Jersey, USA
- 04:00 - 04:20pm: A Framework for Flexible Educational Data Mining
Kyle DeFreitas
University of the West Indies, West Indies
- 04:20 - 04:40pm: Determination of Fake Reviews in Hospitality Sector
Manish Goswami, S. K. Gupta
Indian Institute of Technology, Delhi, India
- 04:40 - 06:00pm: During this period, DMIN attendees are encouraged to participate in sessions belonging to IKE'14, ICAI'14, ICOMP'14, ABDA'14, GEM'14, and EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of DMIN'14.**
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 2-DMIN: REGRESSION, CLASSIFICATION, CLUSTERING, ASSOCIATION

Co-Chairs: Dr. Robert Stahlbock; University of Hamburg, Germany;

Dr. Gary M. Weiss; Fordham University in New York City, USA

July 22, 2014 (Tuesday); 08:00am - 12:00pm

(LOCATION: Ballroom 1)

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: Feature Selection by Tree Search of Correlation-Adjusted Class Distances
Hassan Rabeti, Martin Burtscher
Texas State University, Texas, USA

08:40 - 09:00am: Multi-Level Synthesis of Frequent Rules from Different Databases Using a Clustering Approach
Salim Khiat, Belbachir hafida, Raha! Sid Ahmed
University of Science and Technology USTO National School Polytechnique ENPO, Algeria

09:00 - 09:20am: Mammogram Classification Using Association Rule Mining
Deepa Deshpande
Jawaharlal Nehru Engineering College, India

09:20 - 09:40am: Feature Engineering for Supervised Link Prediction on Dynamic Social Networks
Jeyanthi Narasimhan, Lawrence Holder
Washington State University, Washington, USA

09:40 - 10:00am: A Flexible Feature Selection Framework for Improving Breast Cancer Classification from Sparse Spectrum Count Proteomic Data
Lanfei Shi, Himanshu Grover, Jeya Balaji Balasubramanian, Kumar Kolli, Craig Shriver, Vanathi Gopalakrishnan
University of Pittsburgh, Pittsburgh, USA

10:00 - 10:20am: Optimization of an Individual Re-identification Modeling Process Using Biometric Features
Alejandro Heredia-Langner, Brett Amidan, Shari Matzner, Kristin Jarman
Pacific Northwest National Laboratory, Richland, Washington, USA

10:20 - 10:40am: BREAK

10:40 - 11:00am: For the Sake of More Reliable Over-Sampled Data Instances for a Minor Class
Hyontai Sug, Douglas D. Dankel II
Dongseo University, Korea

11:00 - 11:20am: Entropy Based Adaptive Outlier Detection Technique for Data Streams
Yogita Thakran, Durga Toshniwal, Bhavani Kumar Eshwar
Indian Institute of Technology Roorkee, India

11:20 - 11:40am: Author Attribution of Thomas Paine Work
Smiljana Petrovic, Gary Berton, Robert Schiaffino, Lubomir Ivanov
Iona College, Department of Computer Science, New Rochelle, New York, USA

11:40 - 12:00pm: Generating Well-Behaved Learning Curves: An Empirical Study
Gary Weiss, Alexander Battistin
Fordham University, New York, USA

- 12:00 - 01:00pm:** INVITED LECTURE:
BIG DATA ISSUES FOR MINING KNOWLEDGE IN MAINTENANCE INFORMATION SYSTEMS
 Prof. Diego Galar
 Division of Operation and Maintenance Engineering, Lulea University of Technology, Lulea, Sweden; Former Pro-Vice-Chancellor, Aragon Institute for Engineering Research (I3A), Aragon, Spain
 (LOCATION: Ballroom 1)
- 01:00 - 02:00pm:** LUNCH (On Your Own)
- 02:00 - 03:00pm:** During this period, DMIN attendees are encouraged to participate in sessions belonging to IKE'14, ICAI'14, ICOMP'14, ABDA'14, GEM'14, and EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of DMIN'14.
- 03:00 - 03:40pm:** BREAK & POSTER/DISCUSSION SESSION B-DMIN
 July 22, 2014 (Tuesday)
 (LOCATION: Hallways of Ballrooms 1-5)
- 03:40 - 04:20pm:** INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
 Dr. James A. Crowder
 Chief Engineer, Raytheon Intelligence, Information, and Services Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
 (LOCATION: Ballroom 4)
- 04:20 - 06:00pm:** PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
 PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
 PANELISTS:
 Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
 Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
 Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
 Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
 (LOCATION: Ballroom 4)
- 06:00 - 09:00pm:** TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
 (Please see the lists at the beginning of this book for details)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 3-DMIN: REAL-WORLD DATA MINING APPLICATIONS, CHALLENGES, & PERSPECTIVES**
Co-Chairs: Dr. Mahmoud Abou-Nasr; Ford Motor Company, USA;
Dr. Robert Stahlbock; University of Hamburg, Germany;
Dr. Gary M. Weiss; Fordham University in New York City, USA
July 23, 2014 (Wednesday); 08:00am - 12:00pm
(LOCATION: Ballroom 1)
- 08:00 - 08:20am: XXX Identifying Outliers in Human Movement Trajectories Clustered
 By Hausdorff Distance
 Shubin Parameswaran, Ellen Jeff
 Space and Naval Warfare Systems Center Pacific (SPAWAR), California, USA
- 08:20 - 08:40am: Mechanical Property Classification of VGCNF/VE Nanocomposites
 Using Support Vector Machines
 Osama Abuomar, Sasan Nouranian, Roger King, Trenton Ricks, and
 Thomas Lacy
 Mississippi State University, Center for Advanced Vehicular Systems,
 Mississippi, USA
- 08:40 - 09:00am: APPEs Maps as Tools for Quantifying Performance of Truck Drivers
 Iulian Carpatorea, Nowaczyk Slawomir, Thorsteinn Rognvaldsson, and
 Marcus Elmer
 Halmstad University, Halmstad, Sweden
- 09:00 - 09:20am: Distributed Multi-objective Evolutionary Algorithm for Clustering
 Multi-Characteristic Social Network
 Mustafa Hajeer, Dipankar Dasgupta, King-Ip Lin
 University Of Memphis, Memphis, Tennessee, USA
- 09:20 - 09:40am: A New Effective Information Decomposition Approach for Missing
 Data Recovery
 Shigang Liu
 Deakin University, Australia
- 09:40 - 10:00am: Predicting Causes of Traffic Road Accidents Using Multi-class
 Support Vector Machines
 Elfadil Mohamed
 College of Business Administration, Al Ain University, United Arab
 Emirates (UAE)
- 10:00 - 10:20am: Gold, Oil and the S&P 500 Index: Calm to Crisis and Back
 Mary Malliaris, A. G. Malliaris
 Loyola University, Chicago, Illinois, USA
- 10:20 - 10:40am: BREAK**
- 10:40 - 11:00am: Development of a Prediction Model to Estimate the Effect of Nerve
 Guidance Conduits Applied for Peripheral Nerve Injury Based on
 Bootstrap Aggregated Neural Networks
 Munish Shah, Wei Chang, Kathleen McGuire, Wil Koch, Yan Meng, and
 Xiaojun Yu
 Stevens Institute of Technology, New Jersey, USA
- 11:00 - 11:20am: The Significance of the Race Factor in Breast Cancer Prognosis
 M. Mehdi Owrang
 American University, Washington, D.C., USA
- 11:20 - 11:40am: Automatic Solar Cavity Detection Using Haar Cascade Classifier
 Aijuan Dong
 Hood College, Frederick, Maryland, USA

- 11:40 - 12:00pm: A Proposed Data Mining Model for the Associated Factors of Alzheimer's Disease
Nevine Labib
British University in Egypt, Sadat Academy for Management Sciences, Egypt
- 12:00 - 01:00pm: INVITED LECTURE:
DATA SCIENCE EMERGENCE
Dr. Peter Geczy
National Institute of Advanced Industrial Science and Technology (AIST), Japan; Institute of Physical & Chemical Research (RIKEN); Research Center for Future Technologies
(LOCATION: Ballroom 1)
- 01:00 - 02:00pm: LUNCH (On Your Own)
- 02:00 - 03:00pm: During this period, DMIN attendees are encouraged to participate in sessions belonging to IKE'14, ICAI'14, ICOMP'14, ABDA'14, GEM'14, and EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of DMIN'14.
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-DMIN
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)
- 03:40 - 06:00pm: During this period, DMIN attendees are encouraged to participate in sessions belonging to IKE'14, ICAI'14, ICOMP'14, ABDA'14, GEM'14, and EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of DMIN'14.
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)
- 08:00a - 05:40p: During this period, DMIN attendees are encouraged to participate in sessions belonging to IKE'14, ICAI'14, ICOMP'14, ABDA'14, GEM'14, and EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of DMIN'14.

FCS'14 & ESA'14 & MSV'14 & CSC'14 CONFERENCE **SCHEDULES**

**The 2014 International Conference on
Foundations of Computer Science (FCS'14)**

+

**The 2014 International Conference on
Embedded Systems and Applications (ESA'14)**

+

**The 2014 International Conference on
Modeling, Simulation and Visualization Methods (MSV'14)**

+

**The 2014 International Conference on
Scientific Computing (CSC'14)**

Because of partial topical and technical overlap between FCS'14, ESA'14, MSV'14, & CSC'14, the schedule of these conferences are merged into one comprehensive schedule. It is hoped that this would encourage the participants of the four conferences to explore cross-fertilization of ideas. There are also a number of other sessions (not listed as part of these four conferences) that are of potential interest to FCS'14, ESA'14, MSV'14, and CSC'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, sessions in ABDA'14, FECS'14, ICOMP'14, ICWN'14, and IPCV'14 conferences discuss topics that are within the scope of FCS'14, ESA'14, MSV'14, and CSC'14; these have been scheduled so that selected FCS'14, ESA'14, MSV'14, and CSC'14 attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:**
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:**
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:**
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:**
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)**
- SESSION 1-FCS: EVOLVING SYSTEMS + GRAPH ALGORITHMS + MATH WORDS**
XXX Co-Chairs: Dr. Mebougna Laze Drabo; Alabama A&M University,
Alabama, USA;
Joyshree Nath; St. Xavier's College (Autonomous), India
July 21, 2014 (Monday); 01:00pm - 02:20pm
(LOCATION: Silver Room)
- 01:00 - 01:40pm: INVITED LECTURE: (PROVISIONAL)**
EVOLVING SYSTEMS
Igor Schagaev, Luc Blaeser, Simon Monkman
London Metropolitan University, London, UK;
Hochschule fur Technik Rapperswil, Switzerland;
ITACS Ltd, Stevenage, England
- 01:40 - 02:00pm: Asynchronous P Systems for Uniform Graph Partitioning and**
Related Graph Problems
Kota Hasuo, Akihiro Fujiwara
Kyushu Institute of Technology, Japan
- 02:00 - 02:20pm: Math Words and their Dendrograms**
Casanova-Del-Angel Francisco
SEPI ESIA Campus ALM of the Polytechnic National Inst., Mexico

SESSION 2-ESA: EMBEDDED SYSTEMS + HPC + SENSORY DEVICES + NETWORK ON CHIP SYSTEMS AND APPLICATIONS
XXX Co-Chairs: Prof. Ken Ferens; University of Manitoba, Canada;
Dr. Mebougna Laze Drabo; Alabama A&M University,
Alabama, USA
July 21, 2014 (Monday); 02:20pm - 06:00pm
(LOCATION: Silver Room)

02:20 - 02:40pm: A Computer Engineering Approach to Detect, Prevent and Manage Diabetic Foot Diseases
 Olawale David Jegede, Ken Ferens, Bruce Griffith,
 Blake Podaima, Ramin Soltanzadeh
 University of Manitoba, Winnipeg, Canada;
 Avriel International Inc., Winnipeg, Canada;
 Internet Innovations Center, Winnipeg, Canada

02:40 - 03:00pm: Criteria-based Research on Fundamentals of Embedded System Development in Higher Education
 Steffen Buchner, Sigrid Schubert
 Didactics of Informatics and E-Learning,
 University of Siegen, Siegen, Germany

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-FCS-ESA-MSV-CSC
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)

- 0. The Development of NFC-based Medication Management System for Elderly Patients
 Taebok Yoon, Jonghee Lee
 Department of Computer Software, Seoil University, South Korea;
 Department of Strategic Planning, INPOESTI Company, Seoul, South Korea
- 0. Instruction Cache Pre-Loading Method to Reduce Initial Cold-Misses using SDRAM Burst Transfer
 Hyo-Joong Suh
 School of Computer Science and Information Engineering,
 The Catholic University of Korea, Korea
- 0. ...

SESSION 2-ESA: Continued ... EMBEDDED SYSTEMS + HPC + SENSORY DEVICES + NETWORK ON CHIP SYSTEMS AND APPLICATIONS
(LOCATION: Silver Room)

03:40 - 04:00pm: Embedded MTT-DAS Application Prototyping on an FPGA Based Multiprocessor Architecture
 Benaoumeur Senouci, Smail Niar
 University of Burgundy, LE2I Laboratory, Dijon, France;
 University of Valenciennes Hainaut-Cambresis, Valenciennes, France

04:00 - 04:20pm: Reducing DDR Latency for Embedded Image Steganography
 James Haralambides, Lukas Bijaminas
 Barry University, Miami Shores, Florida, USA

04:20 - 04:40pm: Dynamic-prelink: An Enhanced Prelinking Mechanism without Modifying Shared Libraries
 Hyungjo Yoon, Changwoo Min, Young Ik Eom
 Sungkyunkwan University, Korea; Samsung Electronics, Korea

04:40 - 05:00pm: XXX A Tail Recursive Scheme for Exact Real Number Computation Based on LRT, GMP and FC++
 J. Raymundo Marcial-Romero, J. A. Hernandez, Vianney Munoz,
 Guillermo De Ita, Lourdes Rivas
 Facultad de Ingenieria, UAEM, Toluca, Mexico;
 Facultad de Ciencias de la Computacin, BUAP, Puebla, Mexico

- 05:00 - 05:20pm: Hardware/Software Co-design of Particle Filter in Grid Based Fast-SLAM Algorithm
B. G. Sileshi, C. Ferrer, J. Oliver
Universitat Autònoma de Barcelona, Bellaterra (Barcelona), Spain;
Institut de Microelectrònica de Barcelona (CNM-CSIC), Bellaterra (Barcelona), Spain
- 05:20 - 05:40pm: A Cognitive Approach for Stroke Rehabilitation by Acute Hand Monitoring
R. Hema Barathi, D. Ramya Priyadarshini, K. Sowmya, M. Ramalatha
Department of Information Technology, Kumaraguru College of Technology, Coimbatore, India
- 05:40 - 06:00pm: XXX Intelligent and Secure Routing in Heterogeneous Wireless Networks
Suman, Parvinder Singh, R. B. Patel
Deenbandhu Chhotu Ram University of Science and Technology, India;
G. B. Pant Engineering College, Ghurdauri, Uttarakhand, India;
AND
XXX A Review of Handover Schemes in Overlaid Macro-femto Cellular Networks
Suman Deswal, Anita Singhrova
Deenbandhu Chhotu Ram University of Science and Technology, India
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 3-CSC: COMPUTATIONAL SCIENCE, OBJECT ORIENTED METHODS, FINITE ELEMENT ANALYSIS AND METHODS, & SIMULATION**
XXX Co-Chairs: Dr. Asoke Nath; St. Xavier's College (Autonomous), India; Fatima Allali; Faculty of Science and Technology, Cadi Ayyad University Marrakech, Morocco
July 22, 2014 (Tuesday); 08:00am - 10:20am
(LOCATION: Silver Room)
- 08:00 - 08:20am: FREE SLOT
- 08:20 - 08:40am: Particle-Wave Unification: An Object-Oriented Approach to Equilibrium-Based Computing
Wen-Ran Zhang
Georgia Southern University, Statesboro, Georgia, USA
- 08:40 - 09:00am: Finite Element Analysis of Five-Transmission Lines Embedded in Four-Layered Dielectric Media
Sarhan M. Musa, Matthew N. O. Sadiku
Roy G. Perry College of Engineering, Prairie View A&M University, Prairie View, Texas, USA
- 09:00 - 09:20am: Quasi-TEM Analysis of Multilayer Coplanar Waveguide Broadside Coupled Lines Balun
Sarhan M. Musa, Matthew N. O. Sadiku
Roy G. Perry College of Engineering, Prairie View A&M University, Prairie View, Texas, USA
- 09:20 - 09:40am: Comparison of Interval and Monte Carlo Simulation for Uncertainty Propagation in Atmospheric Dispersion Model
El Abed El Safadi, Olivier Adrot, Jean-Marie Flaus
Laboratory: Grenoble - Sciences pour la Conception, l'Optimisation et la Production (G-SCOP), Grenoble, France
- 09:40 - 10:00am: Numerical Stabilisation of the Lattice Boltzmann Method for Higher Reynolds Number Fluid
Nicolas Maquignon, Julien Duchateau, Gilles Roussel, Francois Rousselle, Christophe Renaud
Lab. Informatique Signal et Image de la Cote d'Opale, France; Universite du Littoral Cote d'Opale, France; Innocold - Institut Technologique du Froid - MREI1, France
- 10:00 - 10:20am: DSP Filter Calculation for a Digital Doppler Velocity Flow Meter
Daniel L. Garcia, Daren R. Wilcox
Southern Polytechnic State University, Marietta, Georgia, USA
- 10:20 - 10:40am: BREAK**
- SESSION 4-MSV: SIMULATION, NUMERICAL METHODS, & APPLICATIONS + VISUALIZATION, GRAPHICS, TOOLS & TECHNIQUES**
XXX Chair: Dr. Devinder Kaur; University of Toledo, Ohio, USA
July 22, 2014 (Tuesday); 10:40am - 12:40pm
(LOCATION: Silver Room)
- 10:40 - 11:00am: XXX Simulink Model of a Full State Observer for a DC Motor Position, Speed, and Current
Louiza Sellami
US Naval Academy, Annapolis, Maryland, USA
- 11:00 - 11:20am: Interoperability Of Devs And C-Bml Simulation Models
Elizabeth Hosang, Gabriel A. Wainer
Department of Systems and Computer Engineering, Carleton University, Ottawa, Ontario, Canada

- 11:20 - 11:40am: A Simulation Approach for Traffic Management
Karmel Manaa
University Of Northumbria, Newcastle, UK
- 11:40 - 12:00pm: Parallel Coordinates for Visualization of Rules Developed Using Grammatical Evolution
Musbah Abdulgader, Devinder Kaur
Department of Electrical Engineering and Computer Science,
University of Toledo, Toledo, Ohio, USA
- 12:00 - 12:20pm: Clustered Data Separation via Barycentric Radial Visualization
Adam Russell, Robert Marceau, Frank Kamayou, Karen Daniels,
and Georges Grinstein
Computer Science Department, University of Massachusetts Lowell,
Lowell, Massachusetts, USA
- 12:20 - 12:40pm: The Singular Properties of the Hermit Curve on Unit Circle
Ching-Shoei Chiang, Ching-Tsorng Tsai
Soochow University, Taiwan, R.O.C.;
Tunghai University, Taiwan, R.O.C.

SESSION 5-FCS: AUTOMATED TESTING + SCHEDULING SYSTEMS + GRAPH LOGIC MODEL
Chairs: TBA
July 22, 2014 (Tuesday); 01:00pm - 02:00pm
(LOCATION: Silver Room)

- 01:00 - 01:20pm: Model-based Automated Testing Using a Record-Replay Mechanism
Junwon Kang, Hyunmin Yoon, Jaemoon Seo, Joongwon Roh, Minsoo Ryu
Hanyang University, Seoul, South Korea
- 01:20 - 01:40pm: Fixed Share Scheduling via Dynamic Weight Adjustment in Proportional Share Scheduling Systems
Hyungwoo Kim, Hyunmin Yoon, Peng Wu, Minsoo Ryu
Hanyang University, Seoul, South Korea
- 01:40 - 02:00pm: Control Operators vs Graph Logic Model
Igor Schagaev
London Metropolitan University, London, UK

SESSION 6-ESA: FORMAL MODELING + ANALYSIS & OPTIMIZATION
+ MICRO-CONTROLLER DESIGN
XXX Chair: Dr. Asoke Nath; St. Xavier's College (Autonomous), India
July 22, 2014 (Tuesday); 02:00pm - 03:00pm
(LOCATION: Silver Room)

- 02:00 - 02:20pm: Formal Modeling and Verification of Dynamic Reconfiguration of Autonomous Robotics Systems
Yujian Fu, Steven Drager
Department of Computer Science, School of Engineering and Technology, Alabama A&M University, Alabama, USA;
Air Force Research Lab, RITA Branch, USA
- 02:20 - 02:40pm: Analysis and Optimization of Paradigm Microprograms
Victor Winter, James Mccoy, Dominic Montoya, Greg Wickstrom
Department of CS, University of Nebraska at Omaha, USA;
Sandia National Laboratories, USA
- 02:40 - 03:00pm: Design and Implementation of Microcontroller-Based R-F Remote Controlled Safe With Digital Code Lock and Indicator
Nwachukwu-Nwokefor K.C., Chukwugoziem Ihekweaba, Emenike Ukeje
Michael Okpara University of Agriculture, Nigeria

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-FCS-ESA-MSV-CSC
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)

- 0. A Study on the Public Opinion on the Issue of Cost Sharing in Higher Education
 Hsiu-Hsi Liu
 Research Center for Educational System and Policy, National Academy for Educational Research, Taiwan, R.O.C.
- 0. The Modelling Design of Human Interface for Arm Strength Training Machine with Biofeedback
 Tze-Yee Ho, Yuan-Joan Chen, Chih-Hao Chiang, Wei-Chang Hung
 Feng Chia University, Taiwan, R.O.C.;
 Ling Tung University, Taiwan, R.O.C.
- 0. Exponential Dissipativity of Discrete-time Switched Systems With Time-varying Delays
 J. H. Park, K. Mathiyalagan, S. M. Lee, J. H. Yoo
 Yeungnam University; Daegu University, South Korea
- 0. Numerical Analyses of the Expansive Flow of a Thrust-Vectoring Nozzle
 Tsung Leo Jiang, Yan-Yi Liu, Hsiang-Yu Huang
 Department of Aeronautics and Astronautics, National Cheng Kung University, Taiwan, R.O.C.
- 0. The Implementation of Windowing Human Interface for Arm Strength Training Machine
 Tze-Yee Ho, Mu-Song Chen, Chih-Hao Chiang, Wei-Chang Hung
 Feng Chia University; Da-Yeh University, Taiwan, R.O.C.
- 0. ...

03:40 - 04:20pm: INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)

04:20 - 06:00pm: PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 7-CSC: FINITE ELEMENT METHODS + ODE + KALMAN FILTER APPLICATIONS + SIMULATION MODELS + ELASTICITY THEORY
Chairs: TBA
July 23, 2014 (Wednesday); 08:00am - 10:20am
(LOCATION: Silver Room)

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: A Finite Difference-extrapolation Method for Solving Ordinary Differential Equations
 Adel N. Boules
 University of North Florida, Jacksonville, Florida, USA

08:40 - 09:00am: Kalman Filter Based Safety Application
 Rawa Adla, Nizar Al-Holou, Youssef Bazzi
 University of Detroit Mercy, Michigan, USA

09:00 - 09:20am: Flow Simulation Models for WinDAM
 Mitchell L. Neilsen
 Kansas State University, Manhattan, Kansas, USA

09:20 - 09:40am: Periodic, Aperiodic, and Partly Periodic Clocks in Scientific Simulations
 Clarence Lehman, Adrienne Keen
 University of Minnesota, Saint Paul, Minnesota, USA;
 London School of Hygiene and Tropical Medicine, London, UK

09:40 - 10:00am: Application of SolidWorks and AMESim-based Updated Simulation Technique to Back-flow Analysis of Trochoid Hydraulic Pump for Lubrication
 Seungwon Jeong, Wonjee Chung, Mansu Kim, Myungsik Kim
 School of Mechatronics, Changwon National University, South Korea; Flutek, Gyeongsangnam-do, South Korea

10:00 - 10:20am: Nonlinear Free Vibration of Nanobeams Subjected to Magnetic Field Based on Nonlocal Elasticity Theory
 Tai-Ping Chang, Quey-Jen Yeh
 Department of Construction Engineering, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan;
 Department of Business Administration, National Cheng-Kung University, Tainan, Taiwan

10:20 - 10:40am: BREAK

SESSION 8-ESA: MICRO-CONTROLLERS, MICRO-PROCESSORS, PROGRAMMING, SOFTWARE SYSTEMS AND RELATED ISSUES
XXX Chairs: David O. Jegede; University of Manitoba, Canada
XXX July 23, 2014 (Wednesday); 10:40am - 01:00pm
(LOCATION: Silver Room)

10:40 - 11:00am: Rift Runner - Engineering Software for a Remotely Controlled Rover
 Erik Willis Sean Saunders, Nathan Cate, Jean-Paul Muyschondt, and Devon M. Simmonds
 University of North Carolina Wilmington, North Carolina, USA

11:00 - 11:20am: Lumousoft Visual Programming Language and its IDE
 Xianliang Lu
 Lumousoft Inc., Waterloo, Ontario, Canada

11:20 - 11:40am: Wireless Analyzer of ISOBUS
Enkhzul Doopalam, Badarch Luubaatar, Amaruvshin Togooch,
and Enkhbaatar Tumenjargal
School of Information and Communications Technology, Mongolian
University of Science and Technology, Ulaanbaatar, Mongolia

11:40 - 12:00pm: Design and Implementation Of a Microcontroller Based Egg
Incubator With Digital Temperature Read Out
T. Obidiwe Anthony, Ihekweaba Chukwugoziem, Aguodoh Patrick
Michael Okpara University of Agriculture Umudike, Nigeria

12:00 - 12:20pm: The Design of an Embedded Self-Diagnostic Hybrid Aquarium
Control System
Chiagunye Tochukwu, Ihekweaba Chukwugoziem
Michael Okpara University of Agriculture, Nigeria

12:20 - 12:40pm: Design of a Standalone FORTH Interpreter for the Microchip
PIC24F Family
Byron A. Jeff
Clayton State University, Morrow, Georgia, USA

12:40 - 01:00pm: XXX An Adaptive Cryptographic and Embedded System Design with
Hardware Virtualization
Chun-Hsian Huang
Department of Computer Science and Information Engineering,
National Taitung University, Taiwan, R.O.C.

01:00 - 01:40pm: LUNCH (On Your Own)

**SESSION 9-FCS: GRAPH ALGORITHMS + COMPUTATIONAL SCIENCE + STATE MACHINE
LANGUAGE & OPTIMIZATION METHODS**
XXX Co-Chairs: Dr. Asoke Nath; St. Xavier's College (Autonomous), India;
Joysree Nath; St. Xavier's College (Autonomous), India
July 23, 2014 (Wednesday); 01:40pm - 03:00pm
(LOCATION: Silver Room)

01:40 - 02:00pm: Improved Computing Performance for Finding the Shortest
Path in Extended Graph
Lau Nguyen Dinh, Chien Tran Quoc, Thanh Le Manh
College of Transport No II, Danang, Vietnam;
Danang University of Education, Danang, Vietnam;
University of Hue, Hue, Vietnam

02:00 - 02:20pm: XXX FREE SLOT

02:20 - 02:40pm: Concrete State Machine Language
Nelson Rushton
Texas Tech University, Texas, USA

02:40 - 03:00pm: Modelling and Optimization in the Interval Uncertainty
Vitaly I. Levin
Penza State Technological University, Penza, Russia

03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION C-FCS-ESA-MSV-CSC**
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)

0. The Virtual Device Managing Module of the Metaverse Assisted
Living Support System
Eunjin Ko, Jonghyun Jang
Electronics and Telecommunications Research Institute (ETRI),
South Korea

- O. Real-time Radar Data Visualization
Giti Javidi, Ehsan Sheybani, Danielle Mason
Virginia State University, Virginia, USA
- O. Simulated Spaceborne Numerical Convergence Study
Jamiiru Luttamaguzi, Ka'Ren Byrd, Akbar Eslami, Giti Javidi,
and Ehsan Sheybani
Virginia State University, Virginia, USA; Elizabeth City State
University, USA
- O. H infinity Sampled-Data Control of LPV Systems with
Time-varying Delay
H. Y. Jung, Ju H. Park, S. M. Lee
Department of Electrical Engineering, Yeungnam University, Korea;
School of Electronics Engineering, Daegu University, Korea
- O. A Dynamical System Approach to Compute the Evolutions of Daily
Commuting Traffics Interacted with Travel Time Information
Ming-Chorng Hwang, Hsun-Jung Cho, Chieh-Yang Chen
National Chiao Tung University, Hsinchu, Taiwan, R.O.C.;
- O. ...

SESSION 10-MSV: MODELING AND APPLICATIONS**Chairs: TBA****July 23, 2014 (Wednesday); 03:40pm - 05:40pm****(LOCATION: Silver Room)**

- 03:40 - 04:00pm: Lifecycle Modeling Methodology for Service Architecture: Toward
a Framework-of-Frameworks for Context-to-Code Modeling
R. William Maule
Information Sciences Department, Naval Postgraduate School,
Monterey, California, USA
- 04:00 - 04:20pm: A Meta Model for Predictive Analysis of Modifications on HPDC
Infrastructures
Christian Straube, Dieter Kranzlmüller
Munich Network Management (MNM) Team,
Ludwig-Maximilians-Universität München (LMU), Germany
- 04:20 - 04:40pm: Comparing Collective Behaviour of Socio-Physical Models
C. B. Butt, D. P. Playne, K. A. Hawick
Computer Science, Massey University, Auckland, New Zealand;
Computer Science, University of Hull, Hull, UK
- 04:40 - 05:00pm: Reducing the Modeling Error in Different Observer Based Regulators
Cs. Banyasz, L. Keviczky
Computer and Automation Research Institute, Hungarian Academy
of Sciences, Budapest, Hungary
- 05:00 - 05:20pm: Model Design for Scheduling Multiple Factory Cranes in
Manufacturing Floor
Hee-Jin Lee, Kwang-Yeol Ryu, Sang-Il Lee, Ho-Yeun Ryu, Hui-Chul Lee
Pusan National University, South Korea;
Korea Institute of Industrial Technology, South Korea
- 05:20 - 05:40pm: XXX Exergaming Simulator for Gym Training, Fitness Testing and
Rehabilitation
Veli-Matti Nurkkala, Jonna Kalermo
Kajaani University of Applied Sciences, Kajaani, Finland
- 06:00 - 09:00pm: **TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the beginning of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 11-CSC: COMPUTATIONAL SCIENCE, SYSTEMS, HPC & APPLICATIONS + NOVEL SCIENTIFIC & ENGINEERING ALGORITHMS & APPLICATIONS
Chairs: TBA
July 24, 2014 (Thursday); 08:00am - 11:20am
(LOCATION: Silver Room)

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: Queuing Network Approximation Technique for Evaluating Performance of Computer Systems with Memory Resource Used by Multiple Job Types
 Mizuki Takaya, Mie Ogiwara, Noorafiza Matrazali, Chiaki Itaba, Itaru Koike, Toshiyuki Kinoshita
 Tokyo University of Technology, Japan

08:40 - 09:00am: Parallel Algorithm for Symmetric Positive Definite Banded Linear Systems: A Divide and Conquer Approach
 S. Chandra Sekhara Rao, Sarita
 Indian Institute of Technology Delhi, India

09:00 - 09:20am: Evolutionary Change in the Way of Information Access - Searching versus Browsing Information in ECM Systems
 Lukasz Osuszek, Stanislaw Stanek
 IBM, Poland

09:20 - 09:40am: A New Algorithm for Multiple Key Linear Interpolation with the Formal Foundation
 Ahmed Tarek
 Department of Science, Cecil College, University System of Maryland (USM), Maryland, USA

09:40 - 10:00am: Application of Gain Scheduling Technique to a 6-Axis Articulated Robot using LabVIEW
 Mansu Kim, Wonjee Chung, Seongwon Jung
 Changwon National University, Changwon, South Korea

10:00 - 10:20am: Fast and Slow MHD Waves in the Turbulent Plasma
 George Jandieri
 Georgian Technical University, Tbilisi, Georgia

10:20 - 10:40am: BREAK

10:40 - 11:00am: Building Fuzzy Inference System in The Political Domain
 Sameera Alshayji, Nasser Al-Sabah, Abdulla Al-Sabah
 Department of Information Systems and Computing, Brunel University, Uxbridge, Middlesex, UK;
 Diwan Amiri, Seef Palace, Kuwait

11:00 - 11:20am: Development of Fault Confirmation Module of Input Parameters in RLW Process by Using BPNN
 Kezia A. Kurniadi, Ryu Kwangyeol, Kim Duckyoung, Ryu Hoyeon
 Department of Industrial Engineering, Pusan National University, Busan; Department of Design and Human Engineering, Ulsan National Institute of Science and Technology, Ulsan; Korea Institute of Industrial Technology, Jinju, South Korea

**SESSION 12-CSC: LATE BREAKING PAPERS & SHORT RESEARCH PAPERS:
COMPUTATIONAL SCIENCE + HIGHER-ORDER METHODS + CELLULAR
AUTOMATA**
XXX Chair: Prof. Ahmed Tarek; Cecil College, USM, Maryland, USA
July 24, 2014 (Thursday); 11:20am - 01:00pm
(LOCATION: Silver Room)

11:20 - 11:40am: Unsolved Problems In Computational Science: I
Shanzhen Gao
University of North Carolina at Charlotte, North Carolina, USA

11:40 - 12:00pm: Parallel Scaling Performance and Higher-Order Methods
Jared Buckley, Gaurav Khanna
Physics Department & Center for Scientific Computing and
Visualization Research, University of Massachusetts Dartmouth,
North Dartmouth, Massachusetts, USA

12:00 - 12:20pm: Testing of Cellular Automata Clustering Algorithm for
Forward EM Calorimeter
Baba V.K.S. Potukuchi, Chaman Lal
Physics Department, University of Jammu, Jammu, India;
Physics Department, Government College for Women, Jammu, India

12:20 - 12:40pm: Automated Electoral System in a Developing Country Democracy
Okonigene Robert, Ojieabu Clement, Samuel John, Agbator Austin
Ambrose Alli University, Ekpoma, Edo State, Nigeria;
Covenant University, Otta, Ogun State, Nigeria

12:40 - 01:00pm: Reversibility of a Nonlinear Hybrid Sensitive Model of
Cellular Automata
Leonardo Alt, Gina Oliveira
Universidade Federal de Uberlandia, Brazil

SESSION 13-ESA: NETWORK ON CHIP + EMBEDDED SYSTEMS AND APPLICATIONS
XXXX Chairs: David O. Jegede; University of Manitoba, Canada
July 24, 2014 (Thursday); 01:20pm - 02:00pm
(LOCATION: Silver Room)

01:20 - 01:40pm: A Primer for Mapping Techniques on NoC Systems
Maribell Sacanamboy, Freddy Bolanos
Computer Sciences and Electronics Department, Pontificia
Universidad Javeriana - Cali, Colombia; Electrical Engineering
and Automatics Department, National University of Colombia,
Medellin, Colombia

01:40 - 02:00pm: Intelligent Assistive Device To Monitor The Ankle-Foot Orthosis
S. Vengateswaran, V. Ramani, M. Ramalatha
Department of Information Technology, Kumaraguru College of
Technology, Coimbatore, India

SESSION 14-MSV: MODELING AND APPLICATIONS
Chairs: TBA
July 24, 2014 (Thursday); 02:00pm - 03:20pm
(LOCATION: Silver Room)

02:00 - 02:20pm: A Non-linear Parametric Second-Degree Model for the Lifetime
of Ultraviolet Cu+ Ne-CuBr Laser
Iliycho P. Iliev, Snezhana G. Gocheva-Ilieva
Department of Physics, Technical University of Sofia,
branch Plovdiv, Bulgaria; Department of Applied Mathematics and
Modeling, Plovdiv University "Paisii Hilendarski", Bulgaria

- 02:20 - 02:40pm: Fourth-Order Compact Formulation Applied to the Resolution of Transmission Lines
Fatima Allali, Nour Eddine Alaa, Abdelilah Ghammaz, Hicham Rouijaa
University Cadi Ayyad, Laboratory LSET, Marrakech, Morocco
- 02:40 - 03:00pm: Using Video Modeling in Virtual Learning Environment to Develop Some of Mathematical Skills Among Children with Down Syndrome in the State of Kuwait
Muntaha S. ALHenda1, Hamdy A. Abdulaziz, Ahmed M. Nouby, and Elsayed S. Elkhamisi
Arabian Gulf University, Manama, Kingdom of Bahrain
- 03:00 - 03:20pm: Automatic Generation of Animatable 3D Personalized Model Based on Multi-view Images
Seong-Jae Lim, Ho-Won Kim, Jin Sung Choi, Bon-Ki Koo
Electronics and Telecommunications Research Institute (ETRI), Daejeon, South Korea

**XXX SESSION 15-MSV: LATE BREAKING PAPERS:
SIMULATION METHODS AND APPLICATIONS + VISUALIZATION +
COMPUTATIONAL MODELING
Chairs: TBA
July 24, 2014 (Thursday); 03:20pm - 05:40pm
(LOCATION: Silver Room)**

NOTE: We anticipate a number of speaker no-shows for this track; this is due to potential delay in obtaining US visa, non registration, ... In cases of no-shows, the presentations can be moved up in order to close time gaps in the session.

- 03:20 - 03:40pm: Meaningful Touch and Gestural Interactions with Simulations Interfacing via the Dart Programming Language
T. H. McMullen, K. A. Hawick
Department of Computer Science, University of Hull, Hull, UK
- 03:40 - 04:00pm: Procedural Generation of Landscapes for Interactive Environments Using the Dart Programming Language
T. H. McMullen, K. A. Hawick
Department of Computer Science, University of Hull, Hull, UK
- 04:00 - 04:20pm: XXX FREE SLOT
- 04:20 - 04:40pm: A Generic Simulation Model For High Performance Computing Systems
Taner Dursun, Hasan Dag
TUBITAK BILGEM UEKAE, Turkey;
Kadir Has University, Istanbul, Turkey
- 04:40 - 05:00pm: XXX FREE SLOT
- 05:00 - 05:20pm: Semiotic Transposition Method for Biomimetic Computational Modeling: an Overview
Carlos Eduardo Pires De Camargo, Italo Santiago Vega
Post-graduate Studies in Intelligence Technologies and Digital Design, Pontificia Universidade Catolica, Sao Paulo, Brazil
- 05:20 - 05:40pm: FREE SLOT

FECS'14 & SWWS'14 CONFERENCE SCHEDULES

The 2014 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'14)

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The 2014 International Conference on Semantic Web and Web Services (SWWS'14)

Because of partial topical and technical overlap between FECS'14 and SWWS'14 tracks, the schedule of SWWS'14 is merged with the schedule of FECS'14, resulting a comprehensive schedule. It is hoped that this would encourage the participants of the two conferences to explore cross-fertilization of ideas. There are also a number of other sessions (not listed as part of these two conferences) that are of potential interest to FECS'14 and SWWS'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, sessions in EEE'14, SAM'14, MSV'14, SERP'14, ICOMP'14, ABDA'14, and FCS'14 conferences discuss topics that are within the scope of FECS'14 and SWWS'14; these have been scheduled so that selected FECS'14 and SWWS'14 attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)
- SESSION 1-FECS: ACCREDITATION & ACADEMIC REVIEWS + EVALUATION, ANALYSIS,
VERIFICATION METHODS & SYSTEMS + INTERDISCIPLINARY SUBJECTS
+ STUDENT SCHOLARSHIP AND OTHER INCENTIVES
XXX Co-Chairs: Dr. Nasser Tadayon; Southern Utah University, Utah, USA;
Dr. Thomas P. Way; Villanova University, PA, USA;
Dr. Ghassan Azar; Lawrence Technological University,
Michigan, USA
July 21, 2014 (Monday); 01:00pm - 03:00pm
(LOCATION: Ballroom 3)
- 01:00 - 01:20pm: A Loosely-Coupled Approach to Interdisciplinary Computer
Science Education
Thomas Way, Seth Whidden
Villanova University, PA, USA
- 01:20 - 01:40pm: A Graduate Merit Scholarship Program at Western Illinois University
John Drea, Martin Maskarinec
College of Business and Technology, Western Illinois University,
Macomb, Illinois, USA; School of Computer Sciences, Western
Illinois University, Macomb, Illinois, USA

- 01:40 - 02:00pm: Assessing Teacher's Teaching Quality in Terms of Teaching Capability and Maturity: a preliminary study
Chung-Yang Chen
National Central University, Taiwan, R.O.C.
- 02:00 - 02:20pm: Institutional Effectiveness Assessment Collaboration Study Based Critical Thinking Approach
Ghassan Azar, Su Yu, Clay Gloster, Naser El-Bathy, Xincheng Xu
Lawrence Technological University - Southfield, Michigan, USA;
Shanghai University of Engineering and Science, P. R. China;
North Carolina A&T State University - Greensboro, NC, USA
- 02:20 - 02:40pm: Verification and Validation of a Database Management Course
Nasser Tadayon, Connie Nyman
Southern Utah University, Cedar City, Utah, USA
- 02:40 - 03:00pm: Analysis of the Relationship Between Previous Ideas about the Physics Concepts and a Poor Student's Performance in Classroom
Guzman Rivera Miguel Angel, Rosete Fonseca Juan Carlos, and Estrada Rojas Felipe
Technological Institute of Queretaro, Computing Engineering, Mechanical Engineering Department, Mexico
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-FECS-SWWS
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**
- SESSION 2-FECS: TEACHING PROGRAMMING + SOFTWARE ENGINEERING + PERFORMANCE
ENHANCEMENT METHODS + INTEGRATED LEARNING & RELATED ISSUES
XXX Co-Chairs: Dr. Dhiya Al-Jumeily; Liverpool John Moores University, UK;
Grace Zhao; Graduate Center, City University of New York. USA
July 21, 2014 (Monday); 03:40pm - 06:00pm
(LOCATION: Ballroom 3)**
- 03:40 - 04:00pm: Introducing Java's Enumerated Type
Jonathan Mohr
University of Alberta, Augustana Campus, Alberta, Canada
- 04:00 - 04:20pm: Helping Students Succeed by Improving CS1 - A Case Study
Robert Hatch
The University of Virginia's College at Wise, Virginia, USA
- 04:20 - 04:40pm: Lessons Learned from an Introductory Java Course for Non-Technical Students
Martin Scaiano, Abbas Javadtalab, Liam Peyton
University of Ottawa, Ottawa, Ontario, Canada
- 04:40 - 05:00pm: Embedded Programming for Computer Scientists
Peter M. Maurer
Baylor University, Waco, Texas, USA
- 05:00 - 05:20pm: Transforming Computing Education Through Integrated Learning: A 3D Programming Course For Undergraduate Students
Bowu Zhang, Mira Yun
Mercyhurst University, Erie, Pennsylvania, USA;
Wentworth Institute of Technology, Boston, Massachusetts, USA
- 05:20 - 05:40pm: Using a Web-Based Testing Tool Repository in Programming Course: An Empirical Study
Anurag Goswami, Gursimran S. Walia, Sameer Abufardeh
North Dakota State University, Fargo, North Dakota, USA

05:40 - 06:00pm: Using Visual Logic with Pseudocode to Teach an Introductory Programming Course
Gina Cooper
Devry University, Downers Grove, Illinois, USA

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)

09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 3-FECS: TOOLS AND SYSTEMS, CLASS MANAGEMENT SYSTEMS, INSTRUCTIONAL DESIGN + LEARNING MODELS + WEB BASED INSTRUCTION, ONLINE SYSTEMS, DISTANCE LEARNING, MOBILE SYSTEMS + SOCIAL NETWORKS**
XXX Co-Chairs: Dr. Alistair McEwan; University of Leicester, UK;
Dr. Don Schwartz; Marist College, Poughkeepsie,
New York, USA
XXX July 22, 2014 (Tuesday); 08:00am - 12:20pm
(LOCATION: Ballroom 3)
- 08:00 - 08:20am: An Interactive Multimedia Website for Teaching and Learning Engineering Design and Manufacturing
 Longhan Xie, Ruxu Du
 Chinese University of Hong Kong, P. R. China;
 South China University of Technology, P. R. China
- 08:20 - 08:40am: Computational Quiz Generation
 Daniel Hoffman, Felix Gianelia, Ming Lu
 Department of Computer Science, University of Victoria,
 Victoria, BC, Canada
- 08:40 - 09:00am: WUTexter: A Classroom Interaction Tool for Anybody Who Can Text
 Benjamin Murray, Hunter Latourette, Ron K. Cytron
 Department of Computer Science and Engineering,
 Washington University, St Louis, Missouri, USA
- 09:00 - 09:20am: Prototype Development of Integrated Class Assistance Application Using Smart Phone
 Kazuya Murata, Takayuki Fujimoto
 Graduate School of Engineering, Toyo University, Saitama, Japan
- 09:20 - 09:40am: Technology Enhanced Learning for Computer Science Education: A Regional STEM Widening Access Case Study
 Roy Sterritt, Julie Campbell, Raymond Bond, George Moore,
 Giuseppe Trombino, Simon Fraser, Brian Cleland, Paul Hanna
 Faculty of Computing and Engineering, University of Ulster,
 Northern Ireland, UK
- 09:40 - 10:00am: Adequacy Of an Immersive Environment as a Teaching-Learning Tool Applying Experimental 3D Limen Method
 Diego-Mauricio Torres-Arias, Trefftz Helmuth
 Instituto Netsys, Colombia; Universidad EAFIT, Colombia
- 10:00 - 10:20am: Offering Service Learning Projects in a New Environment
 Donald R. Schwartz
 School of Computer Science and Mathematics, Marist College,
 Poughkeepsie, New York, USA
- 10:20 - 10:40am: BREAK**
- 10:40 - 11:00am: Flipping the Classroom by Using Cloud Services and Third Party Online Courses in Traditional Class Settings Enables All Computer Science Students an Equal Education
 David J. Powell, Joel Hollingsworth
 Elon University, Elon, North Carolina, USA
- 11:00 - 11:20am: Health Journal Web Service Using Cloud Computing
 Ryan Hausen, Samuel Sambasivam, Simon H. Lin
 Department of Computer Science, College of Liberal Arts and Sciences, Azusa Pacific University, Azusa, California, USA

- 11:20 - 11:40am: Development of Prototype System for the Art Appreciation Support System to Integrate Visitors into Art Objects in Real Time
Koji Fujita, Takayuki Fujimoto
Graduate School of Engineering, Toyo University, Japan
- 11:40 - 12:00pm: A 31-Year Record of CS Enrollment At a Single Urban Public Institution
Aaron Tenenbaum, Yedidyah Langsam
Brooklyn College, Brooklyn, New York, USA
- 12:00 - 12:20pm: Collaborative Software Development: The Thomas Paine Encyclopedia
Lubomir Ivanov
Iona College, New Rochelle, New York, USA
- 12:20 - 01:20pm: **LUNCH (On Your Own)**
- SESSION 4-FECS: PROGRAMMING LANGUAGES, STUDIES AND RELATED ISSUES + TUTORIAL**
XXX Chair: Dr. Irene Polycarpou; UCLan Cyprus (University of Central Lancashire), Cyprus
July 22, 2014 (Tuesday); 01:20pm - 03:00pm
(LOCATION: Ballroom 3)
- 01:20 - 01:40pm: The Effect Of Changing Programming Language to Student Success in Undergraduate Computer Science Curriculum
Ebru Celikel Cankaya
University of Texas at Dallas, Richardson, Texas, USA
- 01:40 - 02:00pm: Mining Student Time Management Patterns in Programming Projects
Dale E. Parson And Allison Seidel
Kutztown University of Pennsylvania, Kutztown, Pennsylvania, USA
- 02:00 - 03:00pm: **TUTORIAL:**
USING WEKA TO MINE TEMPORAL WORK PATTERNS OF PROGRAMMING STUDENTS
Dr. Dale E. Parson
Kutztown University of Pennsylvania, Kutztown, Pennsylvania, USA
- 03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION B-FECS-SWWS**
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)
- 03:40 - 04:20pm: **INVITED LECTURE:**
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria
School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)

- 04:20 - 06:00pm:** **PANEL DISCUSSION:**
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)
- 06:00 - 09:00pm:** **TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the beginning of this book for details)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 5-FECS: LEARNING MODELS, METHODOLOGIES, TOOLS AND CASE STUDIES + AGILE METHODOLOGIES + PAIR PROGRAMMING AND TEAM TEACHING METHODS**
XXX Chair: Eshwar Bachu; University of the West Indies, Trinidad and Tobago
July 23, 2014 (Wednesday); 08:00am - 10:20am
(LOCATION: Ballroom 3)
- 08:00 - 08:20am: How Can Augmented Reality Favor the Learning of Calculus?
 Patricia Salinas, Eliud Quintero, Eduardo Gonzalez-Mendivil
 Tecnologico de Monterrey, Mexico
- 08:20 - 08:40am: Interdisciplinary Team-Teaching Experiences of a Computer and Nuclear Energy Course Designed for Non-Nuclear Engineering Students
 Peter Keiller, Charles Kim, Robert Rwebangira
 Howard University, Washington, DC, USA
- 08:40 - 09:00am: Automated Feedback for Personalized Learning
 David J. Coe, Ronald Bowman, Jason Winningham
 University of Alabama in Huntsville, Huntsville, Alabama, USA
- 09:00 - 09:20am: Running an Agile Class
 Kevin A. Gary
 Arizona State University, Arizona, USA
- 09:20 - 09:40am: A Case Study on Introducing the Design Thinking into PBL
 Shuhei Ohsako, Yasutaka Kamei, Shintaro Hosoi, Weiqiang Kong, Kimitaka Kato, Akihiko Ishizuka, Kazutoshi Sakaguchi, Miyuki Kawatake, Yoshitsugu Morita, Naoyasu Ubayashi, Akira Fukuda
 QUTE: Kyushu University Research Center for Advanced Information & Communication Tech. Education, Kyusyu University, Fukuoka, Japan; Fujitsu, Ltd., Kanagawa, Japan; Fujitsu Design, Ltd., Kanagawa, Japan; Fujitsu University, Ltd., Kanagawa, Japan; Graduate School and Faculty of Design, Kyushu University, Fukuoka, Japan
- 09:40 - 10:00am: The Impact of Cultural Factors on Technology Acceptance, Students Point of View
 Dhiya Al-Jumeily, Abir Hussain, Sam Crate
 Applied Computing Research, Liverpool John Moores University, UK
- 10:00 - 10:20am: Guidelines for Implementing Pair Programming in Introductory CS Courses: Experience Report
 Alex Radermacher, Gursimran S. Walia, Sameer Abufardeh, and Oksana Myronovych
 North Dakota State University, Fargo, North Dakota, USA
- 10:20 - 10:40am: BREAK**
- SESSION 6-SWWS: SEMANTIC WEB AND RELATED ISSUES**
XXX Chair: Dr. En Cheng; The University of Akron, Ohio, USA
July 23, 2014 (Wednesday); 10:40am - 12:20pm
(LOCATION: Ballroom 3)
- 10:40 - 11:00am: Open km-Learning: Using Semantic Web Technologies to Facilitate E-Learning
 Grace Zhao
 Graduate Center, City University of New York, New York, USA
- 11:00 - 11:20am: The Use of Semantic-based Suggestions in the Service Composition Process
 Diogo Felipe Busanello Da Silva, Frank Siqueira
 Federal University of Santa Catarina, Brazil

- 11:20 - 11:40am: Concept Map Based Semantic Representation and Knowledge Visualization
Junfang Zeng
Inst. of Automation, Chinese Academy of Sciences, Beijing, China
- 11:40 - 12:00pm: Semantic Hub Agent for Data Commercialization
Dongsheng Wang
Inst. of Automation, Chinese Academy of Sciences, Beijing, China
- 12:00 - 12:20pm: Introduction to Ubit Semantic Computing
Shengyuan Wu
Shandong University, Jinan, P. R. China

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

SESSION 7-FECS: WEB BASED INSTRUCTION, ONLINE SYSTEMS & METHODS, DISTANCE LEARNING, MOBILE SYSTEMS + SOCIAL NETWORKS
XXX Co-Chairs: Dr. Dale E. Parson; Kutztown University of Pennsylvania, USA;
Dr. Robert Hatch; The University of Virginia's College at Wise, USA;
Dr. Kanwalinder Gagneja; Southern Oregon University, Oregon, USA
July 23, 2014 (Wednesday); 01:20pm - 04:20pm
(LOCATION: Ballroom 3)

- 01:20 - 01:40pm: Global Perspective of Security Breaches in Facebook
Kanwalinderjit Kaur Gagneja
Southern Oregon University, Ashland, Oregon, USA
- 01:40 - 02:00pm: Research Directions for Teaching Programming Online
Amber Settle, Arto Vihavainen, Craig Miller
DePaul University, Chicago, Illinois, USA;
University of Helsinki, Finland
- 02:00 - 02:20pm: Creating an Automated Learning Management Tool in an Engineering Course Based on Interdisciplinary Metrics
Quoc-Viet Dang, Daniel D. Gajski
Henry Samueli School of Engineering, University of California, Irvine, California, USA;
Center for Embedded Computer Systems, University of California, Irvine, California, USA
- 02:20 - 02:40pm: Feeling Glassy: An Analysis of Developing for Google Glass
Abrar Qureshi, Dakota Gallimore, Joseph Lacava
Department of Mathematics and Computer Science,
University of Virginia, College at Wise, Virginia, USA
- 02:40 - 03:00pm: Learner Centered Schemes in the Digital Age
Manny Estabrooks
Red Deer College, Red Deer, Canada
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-FECS-SWWS**
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)
0. Collaborative Research Project for CS and Engineering Students
Subodh Bhandari, Fang Tang, Zekeriya Aliyazicioglu,
Scott Boskovich, Kevin La
California State Polytechnic University, Pomona, CA, USA

0. XXX The Development of Interactive Distance-Learning Laboratory for Teaching Digital Design in Electrical and Computer Engineering
Bassam Shaer, Mohamed Khabou
University of West Florida, Florida, USA
0. ...

SESSION 7-FECS: Continued ... WEB BASED INSTRUCTION, ONLINE SYSTEMS & METHODS, DISTANCE LEARNING, MOBILE SYSTEMS + SOCIAL NETWORKS (LOCATION: Ballroom 3)

03:40 - 04:00pm: Preparing Digital Natives for Industry
Neelu Sinha, Mary Rauscher
Fairleigh Dickinson University, Madison, New Jersey, USA

04:00 - 04:20pm: Computer Hardware Experimental Teaching Based on MOOC
Quan Cheng-Bin, Chan Yong-Qiang
Department of Computer Science and Technology,
Tsinghua University, Beijing, P. R. China

**SESSION 8-FECS: CURRICULUM AND COURSE DEVELOPMENT + RELATED ISSUES AND STUDENT FUNDING STRATEGIES
XXX Chair: Dr. Bassam R. Shaer; University of West Florida, USA
July 23, 2014 (Wednesday); 04:20pm - 06:00pm
(LOCATION: Ballroom 3)**

04:20 - 04:40pm: Web Programming Curriculum: What Changes, What Remains the Same Over Time
Rob Byrd, Meredith Beier
Abilene Christian University, School of Information Technology and Computing, Texas, USA

04:40 - 05:00pm: Blending Art and Technology: Two Courses and Some MAGIC
Ronald P. Vullo, Andrew Phelps, Christopher Egert, Heather Rowles
Golisano College of Computing and Information Sciences, USA;
Rochester Institute of Technology, Rochester, New York, USA;
Northern Virginia Family Service, Oakton, Virginia, USA

05:00 - 05:20pm: Incorporating Entrepreneurship Topic into an Introductory Computer Science Course
Xiaoyuan Suo
Department of Math and Computer Science, Webster University,
Saint Louis, MO, USA

05:20 - 05:40pm: XXX Does Badge-Based Learning Buck the Grading Curve? An Educational Experiment in Computer Architecture
Peter Jamieson
Miami University, Oxford, Ohio, USA

05:40 - 06:00pm: Using Undergraduates as Teaching Assistants at Harbin Institute of Technology
Dalie Sun, Hongli Zhang, Kuanquan Wang
Harbin Institute of Technology, Harbin, P. R. China

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES (Please see the lists at the beginning of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 9-FECS: TEACHING PROGRAMMING + SOFTWARE ENGINEERING + PERFORMANCE ENHANCEMENT METHODS + INTEGRATED LEARNING AND RELATED ISSUES + FLIPPED CLASSROOMS + ATTENDANCE TRACKING SYSTEMS + TEACHING METHODS + TEACHING SUPPORT SYSTEMS AND TOOLS + CASE STUDIES
XXX Co-Chairs: Dr. Jing Pang; California State University, Sacramento, California, USA;
Eshwar Bachu; University of the West Indies, Trinidad and Tobago
July 24, 2014 (Thursday); 08:00am - 11:20am
(LOCATION: Ballroom 3)

08:00 - 08:20am: Programming at Different Levels: A Teaching Module for Undergraduate Computer Architecture Course
 Xuejun Liang, Loretta A. Moore, Jacqueline Jackson
 Department of Computer Science, Jackson State University, Mississippi, USA

08:20 - 08:40am: Visualizing Problem Solving in a Strategy Game for Teaching Programming
 Eshwar Bachu, Margaret Bernard
 Department of Computing and Information Technology, University of the West Indies, St Augustine, Trinidad and Tobago

08:40 - 09:00am: A Study of Kinesthetic Learning Activities Effectiveness in Teaching Computer Algorithms
 Sara Alraddady, Danny Luong, G. Young
 California State Polytechnic University, Pomona, CA, USA

09:00 - 09:20am: The Value of Video Quizzes in a Computer Science Flipped Classroom: An Empirical Study
 Mark C. Lewis, Lisa L. Bender
 Trinity University, San Antonio, Texas, USA;
 University of Houston - Clear Lake, Houston, Texas, USA

09:20 - 09:40am: Tracking Attendance Pilot
 Dwight Deugo
 The School of Computer Science, Carleton University, Ottawa, Ontario, Canada

09:40 - 10:00am: XXX FREE SLOT

10:00 - 10:20am: Visualization and Computer Aided Design Techniques for Teaching Computer Hardware Design Course
 Jing Pang
 Department of Electrical and Electronic Engineering and Program of Computer Engineering, California State University, Sacramento, California, USA

10:20 - 10:40am: XXX Methods for Teaching a First Parallel Computing Course to Undergraduate Computer Science Students
 Mike Estep, Feridoon Moinian, Johnny Carroll, Chao Zhao
 Cameron University, Lawton, Oklahoma, USA

10:40 - 11:00am: It's a NUI World: Incorporating Natural User Interfaces in an HCI course
 Dheivya Thiagarajan, Caitlin Hurley, Amanreet Bajwa, Cyndi Rader
 Colorado School of Mines, Golden, Colorado, USA

- 11:00 - 11:20am: Behavior Mining For Big Data: Promoting Critical Thinking in Data Science Education
Zhengxin Chen
Department of Computer Science, University of Nebraska at Omaha, Nebraska, USA
- SESSION 10-SWWS: WEB SERVICES AND APPLICATIONS**
XXX Co-Chairs: Prof. Toshiyuki Maeda; Hannan University, Japan;
Dr. Dhiya Al-Jumeily; Liverpool John Moores University, UK
July 24, 2014 (Thursday); 11:20am - 12:40pm
(LOCATION: Ballroom 3)
- 11:20 - 11:40am: Extending iTV Applications Through Web Services
Rodrigo C. M. Santos, Marcio F. Moreno, Felipe Nagato,
Luiz Fernando G. Soares
Pontifical Catholic University of Rio de Janeiro, Brazil
- 11:40 - 12:00pm: TrackShip - A Unified Shipment Tracking Application
Harikrishna Bodicharla, En Cheng
Computer Science Department, University of Akron, Ohio, USA
- 12:00 - 12:20pm: Hybrid Software Framework for Web/Mail Interface
Toshiyuki Maeda, Yae Fukushige, Masumi Yajima
Faculty of Management Information, Hannan University, Japan;
Faculty of Economics, Meikai University, Japan
- 12:20 - 12:40pm: Improve XML Web Services' Performance Using SOAP Compression
Iehab Al Rassan, Haifa Alyahya
King Saud University, Saudi Arabia;
University of Hail, Saudi Arabia
- 12:40 - 01:20pm: LUNCH (On Your Own)**
- SESSION 11-FECS: RECRUITMENT, RETENTION & MENTORING + ENROLLMENT STUDIES & MANAGEMENT + TEACHING METHODS + TEAM TEACHING + TEACHING SUPPORT SYSTEMS AND TOOLS + CASE STUDIES**
XXX Chairs: Dr. Jing Pang; California State University, Sacramento, California, USA
July 24, 2014 (Thursday); 01:20pm - 05:40pm
(LOCATION: Ballroom 3)
- 01:20 - 01:40pm: XXX FREE SLOT
- 01:40 - 02:00pm: Increasing Diversity in Engineering, IT, and Computer Science
Milica Barjaktarovic
Hawaii Pacific University, Honolulu, Hawaii
- 02:00 - 02:20pm: An Evolving Educational Advisory Role for Computer Science
Andrew J. Mcallister, Genevieve Audet-Perron, Amanda Gilks,
Debbie Mcanany, Rick Wightman
University of New Brunswick, Fredericton, New Brunswick, Canada
- 02:20 - 02:40pm: Agile - Higher Educating STEM College Students
Stacey Franklin Jones
Executive Management and Technology Partnerships, USA
- 02:40 - 03:00pm: Critical Thinking Strategies in Teaching Advanced Timing Analysis Course
Jing Pang, Amy Qiaoming Liu
California State University, Sacramento, California, USA
- 03:00 - 03:20pm: Capstone Experience with Watermarking
Suhair Amer
Southeast Missouri State University, Missouri, USA

- 03:20 - 03:40pm: Attachment-Theory based Pedagogy
Karina Assiter
Wentworth Institute of Technology, Boston, MA, USA
- 03:40 - 04:00pm: Web-Based Database Project for the Lawton, OK Police Department:
Interdisciplinary Systems Software Development at Cameron University
Chao Zhao, K. David Smith, Mike Estep, Abbas Johari, William Carney
Cameron University, Lawton, Oklahoma, USA
- 04:00 - 04:20pm: Decimal to Binary Number Conversion Can Be Fun
Irene Polycarpou
University of Central Lancashire, Cyprus
- 04:20 - 04:40pm: The Changing Nature of Teaching and Learning Shaped by
Information and Communications Technology (ICT)
Dzao Gilbert, Mbodila Munienge, Kikunga Muhandji
University of Venda, South Africa
- 04:40 - 05:00pm: An Environment to Promote a Visual Learning of Calculus
Patricia Salinas, Eliud Quintero, Eduardo Gonzalez-Mendivil
Instituto Tecnológico y de Estudios Superiores de
Monterrey (ITESM), Mexico
- 05:00 - 05:20pm: Session Keys for Encryption/Decryption in Elliptic Curve
Cryptosystems
Tai-Chi Lee, Donovan Moore
Department of Computer Science and Information Systems,
Saginaw Valley State University, Michigan, USA
- 05:20 - 05:40pm: An Auto-Generation Approach to Create Visualization Teaching
Materials for Data Structures and Algorithms in MS-PPT Format
Sen Zhang
State University of New York, College at Oneonta, Oneonta,
New York, USA

ICAI'14 CONFERENCE SCHEDULE

The 2014 International Conference on Artificial Intelligence

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 PHYSICAL CYBER SOCIAL BIG DATA
 Prof. Amit Sheth
 Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
 Director, Ohio Center of Excellence in Knowledge-enabled Computing
 (Kno.e.sis) and Professor of Computer Science, Wright State
 University, Ohio, USA
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:
 VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
 Prof. Alfred Inselberg
 School of Mathematical Sciences, Tel Aviv University, Israel;
 Senior Fellow, San Diego Supercomputing Center; Inventor of the
 multidimensional system of Parallel Coordinates and author of
 textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
 (praised by Stephen Hawking among others.)
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:
 BIG DATA ANALYTICS COGNITIVE ALGORITHMS
 Dr. Leonid I. Perlovsky
 Harvard University, Cambridge, Massachusetts, USA (School of
 Engineering and Applied Sciences and Medical School Athinoula
 Martinos Brain Imaging Center); The US Air Force Research Lab.,
 USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
 on The Mind and Brain; Recipient of John McLucas Award (the
 highest US Air Force Award for basic research)
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)
- SESSION 1-ICAI: ARTIFICIAL INTELLIGENCE, ALGORITHMS & APPLICATIONS + COMPUTATIONAL
 SCIENCE AND INTELLIGENCE
 Chairs: TBA
 July 21, 2014 (Monday); 01:00pm - 05:40pm
 (LOCATION: Ballroom 4)
- 01:00 - 01:20pm: A Framework for Trust Based Shared Economy
 Henry Hexmoor, Markum Reed, Purvag Patel, Guy Fraker
 Southern Illinois University, Carbondale, Illinois, USA;
 AutonomouStuff, LLC, Morton, Illinois, USA
- 01:20 - 01:40pm: Artificial Intelligence in Clothing Fashion
 Haosha Wang, Khaled Rasheed
 Institute for Artificial Intelligence, University of Georgia, USA
- 01:40 - 02:00pm: Implementation to Provide Individual Illuminance and Color Temperature
 in an Intelligent Lighting System without Chroma Meter
 Miki Mitsunori, Risa Kawashima, Hisanori Ikegami,
 Hiromitsu Nakabayashi, Yohei Azuma, Aida Hiroto
 Doshisha University, Kyoto, Japan

- 02:00 - 02:20pm: NeuroSNP: Tool to Filter SNPs in Whole Genomic DNA
Bruno Zonovelli, Carlos Cristiano Hasenclever Borges, and
Wagner Antonio Arbex
Federal University of Juiz de Fora Juiz de Fora, Brazil;
Brazilian Agricultural Research Corporation, Juiz de Fora, Brazil
- 02:20 - 02:40pm: Representation and Efficient Algorithms for the Study of Cell
Signaling Pathways
Andrei Doncescu, Pierre Siegel, Tan Le
CNRS, LAAS, Toulouse, France;
Aix Marseille Universite, CNRS, Marseille, France
- 02:40 - 03:00pm: Methods of Arabic Manuscripts Digitization
Oleg Redkin, Olga Bernikova
St. Petersburg State University, Department of Asian and
African Studies, Russia
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-ICAI
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**
- 0. Computational Evaluation of Planarian Regeneration Models
Marianna Budnikova, Jeff Habig, Tim Andersen
Boise State University, Boise, ID, USA
 - 0. Current Events Information Providing System Based on Personal
Information and General Importance
Hirokazu Watabe, Misako Imono, Eriko Yoshimura, Seiji Tsuchiya
Department of Intelligent Information Engineering and Science,
Doshisha University, Kyoto, Japan
 - 0. ...
- SESSION 1-ICAI: Continued ... ARTIFICIAL INTELLIGENCE, ALGORITHMS & APPLICATIONS +
COMPUTATIONAL SCIENCE AND INTELLIGENCE
(LOCATION: Ballroom 4)**
- 03:40 - 04:00pm: A Top-Down Perception Approach for Object Recognition
Bernay-Angeletti Coralie, Aynaud Claude, Chapuis Roland, and
Aufreere Romuald
Institut Pascal UMR 6602 UBP / CNRS Campus des Cezeaux, France;
LIMOS UMR, France
- 04:00 - 04:20pm: Estimation of Illuminance/Luminance Influence Factor in Intelligent
Lighting System Using Operation Log Data
Mitsunori Miki, Yuki Sakakibara, Hisanori Ikegami, Hiroto Aida
Graduate School of Science & Eng., Doshisha University, Kyoto, Japan;
Department of Science & Eng., Doshisha University, Kyoto, Japan
- 04:20 - 04:40pm: Heuristic Applied to the Euclidean Steiner Tree Problem with
Node-depth-degree Encoding
Marcos Antonio Almeida De Oliveira, Telma Woerle De Lima,
Les R. Foulds, Anderson Da Silva Soares, Alexandre Claudio Botazzo
Delbem, Clarimar Jose Coelho
Federal University of Goias; ICMC, University of Sao Paulo, Brazil;
Pontifical University Catholic of Goias, Brazil
- 04:40 - 05:00pm: Reducing the Number of Times Lighting Control is Required to Reach
Illuminance Convergence in the Intelligent Lighting System
Mitsunori Miki, Shohei Matsushita, Sho Kuwajima, Hisanori Ikegami,
and Hiroto Aida
Doshisha University, Kyoto, Japan

- 05:00 - 05:20pm:** An Intelligent Lighting System Using a Smartphone as an Illuminance Sensor
Mitsunori Miki, Sho Kuwajima, Shohei Matsushita, Hisanori Ikegami, Yohei Azuma, Hiroto Aida
Doshisha University, Kyoto, Japan
- 05:20 - 05:40pm:** The Prediction and Classification of Family Type by Using Power Consumption Model over Smart Grid
Jihyun Kim, Howon Kim
Department of Computer Engineering, Pusan National University, Republic of Korea, South Korea
- 06:00 - 09:00pm:** **TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the beginning of this book for details)
- 09:00 - 11:45pm:** **CONFERENCE RECEPTION DINNER / SOCIAL**
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 2-ICAI: THE INTERNATIONAL WORKSHOP ON INTELLIGENT LINGUISTIC TECHNOLOGIES 2014, ILINTEC'14**
Chair: Dr. Elena Kozerenko, Russian Academy of Sciences, Russia
July 22, 2014 (Tuesday); 08:00am - 11:40am
(LOCATION: Ballroom 4)
- 08:00 - 08:20am: FREE SLOT
- 08:20 - 08:40am: Building Unified Knowledge Resources for Multiple Applications
 Gavin Matthews, Max Petrenko, Erin MacMurray van Liemt
 Vertical Search Works, USA
- 08:40 - 09:00am: A Rule-Based Approach to Free Word Order Languages
 Anton V. Zimmerling
 SMSUH Moscow, Institute of Linguistics, Russian Academy of Sciences, Moscow, Russia
- 09:00 - 09:20am: On The Method for Automatic Determination of Semantic Similarity of the Document Texts
 Victor N. Zakharov, Alexander A. Khoroshilov, and Alexei A. Khoroshilov
 Institute for Informatics Problems of the Russian Academy of Sciences, Moscow, Russia
- 09:20 - 09:40am: Cognitive Machine Translation Model: Musketeer Classes of Shared Reality
 Boris Gorbis
 Law Offices of Boris Gorbis, Los Angeles, California, USA
- 09:40 - 10:00am: Conceptual Text Generation Based on Key Phrases
 Mikhael M. Charnine, Nikolai V. Somin, Vladimir G. Nikolaev
 Institute for Informatics Problems of the Russian Academy of Sciences, Moscow, Russia
- 10:00 - 10:20am: Linguistic Processor Design Employing the Cognitive Transition Method
 Elena B. Kozerenko
 Institute for Informatics Problems of the Russian Academy of Sciences, Moscow, Russia
- 10:20 - 10:40am: BREAK**
- 10:40 - 11:00am: The Crowdsourcing Linguistic Technology for Experts Assessment
 Mikhael M. Charnine, V. I. Protasov
 Institute for Informatics Problems of the Russian Academy of Sciences, Moscow, Russia
- 11:00 - 11:20am: Conceptual Business Process Structuring by Extracting Knowledge from Natural Language Texts
 Oleg V. Zolotarev, Mikhael M. Charnine, Andrey G. Matskevich
 Institute for Informatics Problems of the Russian Academy of Sciences, Moscow, Russia
- 11:20 - 11:40am: Patchwork and Plagiaristic Texts Typology and Identification Techniques
 Mikhael Yu Mikheev, Elena B. Kozerenko, Nikolai V. Somin, Yulia I. Morozova, Irina V. Galina
 Institute of Informatics Problems of the Russian Academy of Sciences, Moscow, Russia

- SESSION 3-ICAI: MACHINE LEARNING, AGENT TECHNOLOGIES, SWARM OPTIMIZATION, HMM AND APPLICATIONS**
XXX Chair (probably from 11:40am - 12:20pm): Prof. Eman El-Sheikh;
Associate Dean, University of West Florida, Pensacola, Florida, USA
July 22, 2014 (Tuesday); 11:40am - 03:00pm
(LOCATION: Ballroom 4)
- 11:40 - 12:00pm: A Comparison of Machine Learning Techniques for the Generation of River and Stream Water Quality Estimates
 Alexander Maestre, Eman El-Sheikh
 The University of Alabama, Tuscaloosa, Alabama, USA;
 University of West Florida, Pensacola, Florida, USA
- 12:00 - 12:20pm: Manipulation of Nodes in a Connected Car Network
 Henry Hexmoor, Guy Fraker
 Southern Illinois University, Carbondale, Illinois, USA;
 AutonomousStuff.com, Morton, Illinois, USA
- 12:20 - 01:20pm: LUNCH (On Your Own)**
- 01:20 - 01:40pm: Teeth Selection Using Particle Swarm Optimization
 E. B. Barboza, A. Z. Peixinho, A. N. Marana, D. T. Oliveira
 Faculty of Sciences, UNESP - Univ. Estadual Paulista, Brazil;
 Bauru School of Dentistry, USP - Univ. of Sao Paulo, Bauru, Sao Paulo, Brazil
- 01:40 - 02:00pm: An Automatic Speech Recognition for the Filipino Language Using the HTK System
 John Lorenzo Bautista, Yoon-Joong Kim
 Hanbat National University, South Korea
- 02:00 - 02:20pm: SPSO-TVAC Congestion Management in an Practical Electricity Market Based Generator Sensitivity
 H. A. Shayanfar, H. Shayeghi, A. Ghasemi
 Faculty of Engineering, South Tehran Branch, Tehran, Iran;
 Department of EE, University of Mohaghegh Ardabili Ardabil, Iran
- 02:20 - 02:40pm: Optimal Allocation and Sizing of Capacitors by BPSO Algorithm with Consideration of Annual Load Profile: A Real Case Study
 H. Shayeghi, H. A. Shayanfar, A. Ghasemi
 University of Mohaghegh Ardabili, Ardabil, Iran;
 Iran University of Science and Technology, Tehran, Iran
- 02:40 - 03:00pm: A Pong Game Agent Using the Neuronal Network Model
 Robert Hercus, Hong-Shim Kong
 Neuramatix Sdn. Bhd., Malaysia
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-ICAI**
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)
- O. On Improving Failure Mode and Effects Analysis (Fmea) from Different Artificial Intelligence Approaches
 J. Puente, P. Priore, I. Fernandez, N. Garcia, R. Pino, and D. De La Fuente
 Escuela Politecnica de Ingenieria de Gijon, Campus de Viesques s/n, Gijon (Asturias), Spain

0. IIs With Multiple Variable Neighbourhood Descendent For The Vehicle Routing Problem With Multiple Trips
A. Gomez, D. Arguelles, I. Gallego, J. Lopez, J. Parreno, and D. De La Fuente
Escuela Politecnica de Ingenieria de Gijon, Campus de Viesques s/n, Gijon (Asturias), Spain
0. ...

**03:40 - 04:20pm: INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)**

**04:20 - 06:00pm: PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)**

**06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 4-ICAI: KNOWLEDGE DISCOVERY AND LEARNING
Co-Chairs: Dr. Raymond A. Liuzzi; Raymond Technologies, New York, USA;
Dr. Peter M. LaMonica, US Air Force Research Lab, AFRL, RIED, USA;
Dr. Todd Waskiewicz, US Air Force Research Lab, AFRL, RIED, USA)
July 23, 2014 (Wednesday); 08:00am - 11:20am
(LOCATION: Ballroom 4)

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: Collaborative Information Analysis and Visualization for Knowledge Discovery
 Perakath Benjamin, Karthic Madanagopal, Belita Gopal, and John Hamilton
 Knowledge Based Systems, Inc., Austin, Texas

08:40 - 09:00am: Artificial Intelligence and Radar Target Tracking
 Gerard T. Capraro
 Capraro Technologies, Inc., Utica, New York, USA

09:00 - 09:20am: Deep Collaborative Data Fusion in a Cloud Framework
 Aaron Wheeler
 3-Sigma Research, Inc., Indialantic, Florida, USA

09:20 - 09:40am: Functions as Conditionally Discoverable Relational Database Tables
 Attila Ondi, Tod Hagan
 Securboration Inc., NASA Blvd., Melbourne, Florida, USA

09:40 - 10:00am: Temporal Modeling of Twitter Posting Behavior: An Empirical Study
 Matthew Michelson, John Bumgarner
 InferLink Corporation, El Segundo, California, USA;
 U.S. Cyber Consequences Unit, Charlotte, North Carolina, USA

10:00 - 10:20am: Case Studies: Big Data Analytics for System Health Monitoring
 Dinkar Mylaraswamy, Brian Xu, Paul Dietrich, Anandavel Murugan
 Honeywell Aerospace, Golden Valley, Minnesota, USA;
 Honeywell Technology Solutions Limited, Madurai, India

10:20 - 10:40am: BREAK

10:40 - 11:00am: Extraction of Entities and Relationships from Text for Social Network Analysis
 Todd Waskiewicz
 US Air Force Research Lab, AFRL/RIED, Rome, New York, USA

11:00 - 11:20am: Identifying and Resolving Conflicts in Multi Source Data
 J. M. Brown, C. G. Fournelle, John Spina
 Boston Fusion, Corp., Burlington, Massachusetts, USA;
 US Air Force Research Lab, AFRL/RIED, Rome, New York, USA

- SESSION 5-ICAI: NATURAL LANGUAGE PROCESSING, TOPIC DETECTION, LINGUISTIC BASED METHODS, HUMAN-MACHINE INTERACTION + ROBOTICS AND APPLICATIONS, BCI, PATTERN RECOGNITION AND DIMENSIONALITY REDUCTION METHODS**
XXX Co-Chairs: Dr. Harris Wang; Athabasca University, Canada;
Marvin Andujar; University of Florida, Florida, USA
July 23, 2014 (Wednesday); 11:20am - 03:00pm
(LOCATION: Ballroom 4)
- 11:20 - 11:40am: Performance of a Natural Language Framework
Waleed Faris, Kam-Hoi Cheng
Computer Science Department, University of Houston, Texas, USA
- 11:40 - 12:00pm: Assigning Stress to Out-of-vocabulary Words: Three Approaches
Manex Agirrezabal, Jeffrey Heinz, Mans Hulden, Bertol Arrieta
University of the Basque Country (UPV/EHU), Spain;
University of Delaware, Newark, Delaware, USA;
University of Helsinki, Finland
- 12:00 - 12:20pm: A System for Answering Scheduling Questions Based on Cocept Association
Eriko Yoshimura, Misako Imono, Seiji Tsuchiya, Hirokazu Watabe
Doshisha University, Kyoto, Japan
- 12:20 - 12:40pm: XXX Deep Neural Network Based Feature Representation for Weather Forecasting
James N.K. Liu, Yanxing Hu, Jane Jia You, Pak Wai Chan
The Hong Kong Polytechnic University, Hong Kong
- 12:40 - 01:20pm: LUNCH (On Your Own)**
- 01:20 - 01:40pm: The SWAM Arabic Morphological Tagger: Multilevel Tagging and Diacritization Using Lexicon Driven Morphotactics and Viterbi
Mohammed A. El-Affendi, Majdy Al-Tayeb
Prince Sultan University, Saudi Arabia;
Faculty of Mathematical Sciences, University of Khartoum, Sudan
- 01:40 - 02:00pm: An Over the Cloud Infrastructure Mind-Machine Interface
Chris S. Crawford, Marvin Andujar, Sekou Remy, Juan E. Gilbert
Clemson University, Clemson, South Carolina, USA
- 02:00 - 02:20pm: Bipedal Robot Walking and Balancing using a Neuronal Network Model
Robert Hercus, Litt-Pang Hiew, Nurain Saaidon, Kit-Yee Wong, and Kim-Fong Ho
Neuramatix Sdn. Bhd., Malaysia
- 02:20 - 02:40pm: Fault Detection in Industrial Plant Using k-Nearest Neighbors with Random Subspace Method
Fellipe Do Prado Arruda, Valniria Da Silva Bandeira, Kleiton Vinicius Braga, Clarimar Jose Coelho, Anderson Da Silva Soares, Gustavo Teodoro Laureano, Telma Woerle De Lima
Pontifical University Catholic of Goias, Goiania, GO, Brazil;
Federal University of Goias, Goiania, GO, Brazil
- 02:40 - 03:00pm: Neural Networks Applied to Recognition of Late Blight in Brazilian Tomato Crops
Gizelle Kupac Vianna, Sergio Manuel Serra Da Cruz
Instituto de Ciencias Exatas Departamento de Matematica,
Universidade Federal Rural do Rio de Janeiro (UFRRJ), Brazil

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-ICAI
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)

- O. Judging Emotion from EEGs Using a Clustered EEG Feature Knowledge Base
 Seiji Tsuchiya, Misako Imono, Eriko Yoshimura, Hirokazu Watabe
 Doshisha University, Kyoto, Japan
- O. Human-Robot Teaming with Sliding Autonomy
 Jacob Longazo, Michael Heid, Fang Tang
 California State Polytechnic University, Pomona, California, USA

SESSION 6-ICAI: COMPUTATIONAL INTELLIGENCE, DATA FUSION, AI, AND NOVEL APPLICATIONS
Chair: TBA
July 23, 2014 (Wednesday); 03:40pm - 05:40pm
(LOCATION: Ballroom 4)

NOTE: We anticipate a large number of speaker no-shows for this track; this is due to potential delay in obtaining US visa, non registration, ... In cases of no-shows, the presentations can be moved up in order to close time gaps in the session.

- 03:40 - 04:00pm: The Influence of Eye-gaze on the Accuracy of a P300 Speller
 Jin-Sup Eom, Mi-Sook Park, Young-Ji Eom, E-Nae Cheong, Jin-Hun Sohn
 Department of Psychology, Brain Research Institute, Chungnam National University, Daejeon, South Korea
- 04:00 - 04:20pm: Multisource Image Fusion Based on Wavelet Transform
 Naveed Khan
 King Saud University, Riyadh, Saudi Arabia
- 04:20 - 04:40pm: Improving Recall of Context-sensitive Spelling Correction Using the Relaxation of Particle Constraint Conditions
 Hyun Soo Choi, Aesun Yoon, Hyuk-Chul Kwon
 Pusan National University, Busan, Republic of Korea
- 04:40 - 05:00pm: Malware Detection with Computational Intelligence
 Brittany Byrd, Rakesh Malik, Venkata Kandalam, Qingzhong Liu
 Sam Houston State University, Huntsville, Texas, USA
- 05:00 - 05:20pm: Neural Pathways in Processing of Sexual Arousal: A Dynamic Causal Modeling Study
 Ji-Woo Seok, Mi-Sook Park, Sunju Sohn, Jin-Hun Sohn
 Department of Psychology, Brain Research Institute, Chungnam National University, Daejeon, South Korea;
 Department of Social Welfare, Cheongju University, South Korea
- 05:20 - 05:40pm: Cross-Country Technologies of Spherical Mobile Robot
 Zhao Wei, Sun Hanxu
 School of Automation, Beijing University of Post and Telecommunication, P. R. China
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the begining of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

**SESSION 7-ICAI: (CONCURRENT SESSION WITH SESSION 10-ICAI)
FUZZY LOGIC & SYSTEMS AND APPLICATIONS + ANN
INFORMATION RETRIEVAL & SEARCH METHODS + DECISION SUPPORT SYSTEMS
+ MEDICAL APPLICATIONS, ASSISTIVE LIVING AND HEALTHCARE
XXX Chair (08:00am - 10:40am): TBA
XXX Chair (10:40am - 12:20pm): Prof. Xiao-Hua Yu; California
Polytechnic State University, San Luis Obispo, California, USA
July 24, 2014 (Thursday); 08:00am - 12:20pm
(LOCATION: Ballroom 4)**

08:00 - 08:20am: Application Of Artificial Neural Network Model in Forecasting Zaria Rainfall, Kaduna State, Nigeria
Folorunsho Joseph Olaniyi
Department of Geography, Kaduna State University, Nigeria

08:20 - 08:40am: Processing of ICARTT Data Files Using Fuzzy Matching and Parser Combinators
Matthew T. Rutherford, Nathan D. Typanski, Dali Wang, Gao Chen
Christopher Newport University, Virginia, USA;
NASA Langley, Hampton, Virginia, USA

08:40 - 09:00am: Underwater Acoustic Monitoring Using MFCC for Fuzzy C-Means Clustering, Naive-Bayes and Hidden Markov Model-Based Classifiers
Cristian H. Alzate, Samira E. Ortiz, Vidya Manian
University of Puerto Rico, Mayaguez Campus, Puerto Rico

09:00 - 09:20am: Optimal Damping of Oscillation in Multi-machine Power System by Renewable Energy Effects
H. A. Shayanfar, O. Abedinia, N. Amjady
Center of Excellence for Power System Automation and Operation,
Iran University of Science and Technology, Tehran, Iran;
Electrical Engineering Department, Semnan University, Semnan, Iran

09:20 - 09:40am: FDM Based MOP to Attune IPFC POD Controller and Dual-Input PSS in Order to Improve Power System Dynamic Performance
H. Shayeghi, Y. Hashemi, H. A. Shayanfar
University of Mohaghegh Ardabili, Ardabil, Iran;
Iran University of Science and Technology, Tehran, Iran

09:40 - 10:00am: Improving Clinical Practice using Clinical Decision Support Systems with Medical Logic Modules
Christian J. Schuh, Jeroen S. De Bruin
Center for Medical Statistics, Informatics and Intelligent Systems (CeMSIIS), Medical University of Vienna, Vienna, Austria

10:00 - 10:20am: Using an Inference Engine for AI in the Office Tactics Video Game
Arturo I. Concepcion, Edward Munoz, Matthew Hawkins, Diane Balane
School of Computer Science & Engineering, California State University San Bernardino, California, USA

10:20 - 10:40am: BREAK

10:40 - 11:00am: Topic-Model Based Query Intent Prediction for Search by Multiple Examples
Mingzhu Zhu, Chao Xu, Yi-Fang Brook Wu
New Jersey Institute of Technology, New Jersey, USA

11:00 - 11:20am: A Hybrid Search Method to Find Minimal Length Paths for Navigation Route Planning
Yong-Hu Lee, Sang-Woon Kim
Department of Computer Engineering, Myongji University, South Korea

- 11:20 - 11:40am: MRI Image Registration With Artificial Neural Networks
 Pramod Gadde, Xiao-Hua Yu
 California Polytechnic State University, San Luis Obispo,
 California, USA
- 11:40 - 12:00pm: Application of an Autonomous System for Identification of Some
 Living Activities in Bathroom
 Fu-Hua Chou, Sue-Ping Yuan
 Chien Hsin University of Science and Technology, Taiwan, R.O.C.;
 Taiwan Implant Technology Company, Taiwan, R.O.C.
- 12:00 - 12:20pm: A Comparative Analysis for Mobile and Computer-Based Aphasia Therapy
 Kamuela Parker, Heui-Seok Lim
 Korea University, Seoul, South Korea
- 12:20 - 01:20pm: **LUNCH (On Your Own)**
- SESSION 8-ICAI: (CONCURRENT SESSION WITH SESSION 10-ICAI)**
LEARNING METHODS + ONTOLOGY, ONTOLOGICAL ARGUMENTS, AND LOGIC
+ KNOWLEDGE REPRESENTATION AND KNOWLEDGE BASED SYSTEMS
Chair: TBA
July 24, 2014 (Thursday); 01:20pm - 03:00pm
(LOCATION: Ballroom 4)
- 01:20 - 01:40pm: A Protocol for Intelligent Agent Systems Enabling Incidental
 Learning on the Web
 Hongxue (Harris) Wang
 Athabasca University, Alberta, Canada
- 01:40 - 02:00pm: The Cognitive, Interactive Training Environment (CITE)
 James A. Crowder, Shelli Friess
 Raytheon Intelligence, Aurora, Colorado, USA;
 Relevant Counseling, Englewood, Colorado, USA
- 02:00 - 02:20pm: A Population-Based Incremental Learning Tool for Finite Impulse
 Response (FIR) Filters Design
 Katherine Ortega Galeano, Freddy Bolanos Martinez
 Universidad Nacional de Colombia, Colombia
- 02:20 - 02:40pm: Error Analysis for Vector-Valued Regularized Least-Squares Algorithm
 Yong Liu, Shizhong Liao
 Tianjin University, Tianjin, P. R. China
- 02:40 - 03:00pm: Ontologies to Coordinate Multiple Views: Exploring Document Collections
 Jorge Marques Prates, Rogerio Eduardo Garcia, Danilo Medeiros Eler
 UNESP-Universidade Estadual Paulista, Presidente Prudente, SP, Brazil
- 03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION D-ICAI**
July 24, 2014 (Thursday)
(LOCATION: Hallways of Ballrooms 1-5)

- SESSION 9-ICAI: (CONCURRENT SESSION WITH SESSION 11-ICAI)**
AI, ALGORITHMS & APPLICATIONS + COMPUTATIONAL SCIENCE AND COMPUTATIONAL INTELLIGENCE
XXX Chair: Prof. Dr. Edgard Thomas Martins; Federal University of Brazil, Brazil
July 24, 2014 (Thursday); 03:40pm - 05:00pm
(LOCATION: Ballroom 4)
- 03:40 - 04:00pm: Education Environment Comparative Studies: Actors And Resources In Distance
 Edgard Thomas Martins, Isnard Thomas Martins
 Universidade Federal de Pernambuco, Recife, Brazil;
 Institute for Universidade Estacio de Sa, Advanced Systems Engineering, Rio de Janeiro, Brazil
- 04:00 - 04:20pm: An Extraction Method of Influential Lightings for Illuminance Sensors on An Intelligent Lighting System in Large Office
 Hisanori Ikegami, Miki Mitsunori, Sho Kuwajima, Hiroto Aida
 Doshisha University, Kyoto, Japan
- 04:20 - 04:40pm: Constraint Based Staff Scheduling Optimization Using Single Player Monte Carlo Tree Search
 Cheechian Cheng, Norman Carver
 Southern Illinois University, Carbondale, Illinois, USA
- 04:40 - 05:00pm: Combination and Analysis of Features from Forensic Letters
 Aline Maria M. M. Amaral, Cinthia O. A. Freitas, Flavio Bortolozzi
 UNICESUMAR - Centro Universitario de Maringa, Brazil;
 PUCPR - Pontificia Universidade Catolica do Parana, Brazil
- SESSION 10-ICAI: (CONCURRENT SESSION WITH SESSIONS 7-ICAI & 8-ICAI)**
AI SYSTEMS + NEURAL NETWORKS AND APPLICATIONS + DATA MINING + MACHINE LEARNING
XXX Chair: Dr. John N. Carbone; Raytheon Intelligence, Information and Services, Colorado, USA
July 24, 2014 (Thursday); 10:40am - 03:00pm
(LOCATION: Ballroom 1)
- 10:40 - 11:00am: Application of Multilayer Perceptrons for Response Modeling
 Anatoli Nachev, Mairead Hogan
 Business Information Systems, Cairnes Business School,
 National University of Ireland, Galway, Ireland
- 11:00 - 11:20am: Towards Optimizing the Selection of Neurons in Affordable Neural Networks
 Joel T. Ausonio, Richard J. Mitchell, William Holderbaum
 School of Systems Engineering, University of Reading, Reading, UK
- 11:20 - 11:40am: XXX FREE SLOT
- 11:40 - 12:00pm: Psychological Constructs for AI Systems: The Information Continuum
 James A. Crowder
 Raytheon Intelligence, Aurora, Colorado, USA
- 12:00 - 12:20pm: A Study on Violence in Major Metropolises Using a Variables Treatment via Neural Networks - Self Organizing Maps
 Isnard T. Martins, Edgard Martins
 Universidade Estacio de Sa, Brazil;
 Universidade Federal de Pernambuco, Brazil
- 12:20 - 01:20pm: **LUNCH (On Your Own)**

- 01:20 - 01:40pm: XXX FREE SLOT
- 01:40 - 02:00pm: A Hybrid Artificial Neural Network and VEPSO based on Day-ahead Price Forecasting of Electricity Markets
O. Abedinia, N. Amjady, H. A. Shayanfar
Electrical Engineering Department, Semnan University, Semnan, Iran;
Faculty of Engineering, South Tehran Branch, Islamic Azad University, Tehran, Iran
- 02:00 - 02:20pm: Use of Artificial Neural Networks for Completing Data Series Streamflow Hydrologic
Sergio Luis Yoneda, Rogerio Andrade Flauzino, Lucas Assis De Moraes, Marcel Ayres De Araujo
University of Sao Paulo USP, Sao Carlos, Brazil
- 02:20 - 02:40pm: FREE SLOT
- 02:40 - 03:00pm: FREE SLOT
- 03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION D-ICAI**
July 24, 2014 (Thursday)
(LOCATION: Hallways of Ballrooms 1-5)
- SESSION 11-ICAI: (CONCURRENT SESSION WITH SESSION 9-ICAI)**
KNOWLEDGE ENGINEERING, EVOLUTIONARY STRATEGIES, GENETIC ALGORITHMS AND NOVEL APPLICATIONS
XXX Chair: Dr. John N. Carbone; Raytheon Intelligence, Information and Services, Colorado, USA
July 24, 2014 (Thursday); 03:40pm - 05:00pm
(LOCATION: Ballroom 1)
- 03:40 - 04:00pm: Global Temperature Vs. Greenhouse Emissions Model: Genetic Algorithm Driven Parametric Multiobjective Fitting
Javier Sanchez-Medina, Jeffrey Miller, Enrique Rubio-Royo
University of Las Palmas de Gran Canaria, Spain;
University of Southern California, Los Angeles, California, USA
- 04:00 - 04:20pm: Eliminating Cognitive Ambiguity with Knowledge Relativity Threads
James A. Crowder, John Carbone
Raytheon Intelligence, Aurora, Colorado, USA
- 04:20 - 04:40pm: Implementation of an Evolutionary Algorithm Using the Node-Depth-Degree Encoding in a Nios II processor in FPGA
Gustavo Siqueira Vinhal, Telma Woerle De Lima, Anderson Da Silva Soares, Gustavo Teodoro Laureano, Clarimar Jose Coelho, Marcilyanne Moreira Gois, Alexandre Claudio Botazzo Delbem
Federal University of Goias, Brazil
- 04:40 - 05:00pm: Genetic Algorithm Based Optimization for Energy-aware Hybrid Flow Shop Scheduling
Jihong Yan, Jing Wen, Lin Li
Harbin Institute of Technology, Harbin, P. R. China

- SESSION 12-ICAI: XIV TECHNICAL SESSION ON APPLICATIONS OF ADVANCED AI TECHNIQUES TO INFORMATION MANAGEMENT FOR SOLVING COMPANY-RELATED PROBLEMS**
Co-Chairs: Dr. David de la Fuente; University of Oviedo, Spain;
Dr. Jose A. Olivas, University of Castilla - La Mancha, Spain
July 24, 2014 (Thursday); 05:00pm - 06:00pm
(LOCATION: Ballroom 1)
- 05:00 - 05:20pm: From the RCPSP to the DRCMPSP: Methodological Foundations
F. A. Villafanez, A. Lopez-Paredes, J. Pajares, D. De la Fuente
Escuela de Ingenierias Industriales, Sede Paseo del Cauce, University
of Valladolid, Valladolid, Spain
- 05:20 - 05:40pm: Improving Business Processes Management Systems by Introducing Soft
Computing Elements
Francisco P. Romero, Arturo Peralta, Jose A. Olivas, and
Jesus Serrano-Guerrero
University of Castilla-La Mancha, Ciudad Real, Spain
- 05:40 - 06:00pm: Summarizing Information by Means of Causal Sentences
C. Puente, J. A. Olivas, I. Prado
Advanced Technical Faculty of Engineering - icai, Pontificia
Comillas University, Madrid, Spain

ICWN'14 CONFERENCE SCHEDULE

The 2014 International Conference on Wireless Networks (ICWN'14)

There are a number of other sessions (not listed as part of ICWN'14 in this schedule) that are of potential interest to ICWN'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, some sessions in SAM'14, ESA'14, FECS'14, GCA'14, ICOMP'14, and PDPTA'14 conferences discuss topics that are within the scope of ICWN'14; these have been scheduled so that selected ICWN'14 groups or attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:**
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:**
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:**
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:**
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)**
- SESSION 1-ICWN: MOBILE COMPUTING + WIRELESS NETWORK APPLICATIONS, AD-HOC NETWORKS,**
VANET, NOVEL ALGORITHMS, PROTOCOLS AND RELATED TECHNOLOGIES
XXX Chair: Prof. Hwajung Lee; Radford University, Virginia, USA
July 21, 2014 (Monday); 01:00pm - 03:00pm
(LOCATION: Platinum Room)
- 01:00 - 01:20pm: TTraffic: A Fully Integrated Accident Management System in**
Vehicular Networks Through Smartphones
Sevgi Kaya, Burcu Gulfem Ozergin, Halid Ozsoy, Taskin Kocak,
and Cagri Gungor
ETH Zurich, Zurich, Switzerland; Bahcesehir University, Istanbul,
Turkey; Abdullah Gul University, Kayseri, Turkey
- 01:20 - 01:40pm: Application Of Autonomous Mobile Agents**
Odhambo Marcel O., Aderemi Lawal
University of South Africa, South Africa
- 01:40 - 02:00pm: Fixed Cluster Head Based Routing For Heterogeneous Mobile**
Wireless Sensor Network
Jaideep Lakhota, Rajeev Kumar
National Institute of Technology, Hamirpur, India

- 02:00 - 02:20pm: Region Authority (RA) Collaborated Certificate Organization and Management in VANET
Shahnawaj Khan, Naveen Chauhan
National Institute of Technology, Hamirpur, India
- 02:20 - 02:40pm: A Heuristic Algorithm for Longest Simple Cycle Problem
Parveen Kumar, Nitin Gupta
National Institute of Technology, Himachal Pradesh, India
- 02:40 - 03:00pm: Performance Evaluation of 6LoWPAN Based Networks for Ubiquitous Health Monitoring System
Waiser Mehmood, Adel Ben Mnaouer, Ammad Hassan, Rohan Tabish, Brahim Gaabab, Farid Touati
Qatar University, Doha, Qatar;
Canadian University of Dubai, Dubai, UAE
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-ICWN
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**
0. A New Routing Protocol for Improving Path Stability in Mobile Ad-hoc Networks
Hyung-Jik Kim, Hae-Il Choi, And Sunwoong Choi
School of Electrical Engineering, Kookmin University, Korea
0. ...
- SESSION 2-ESA: EMBEDDED SYSTEMS + HPC + SENSORY DEVICES + NETWORK ON CHIP SYSTEMS AND APPLICATIONS
XXX Co-Chairs: Prof. Ken Ferens; University of Manitoba, Canada;
Dr. Mebougna Laze Drabo; Alabama A&M University,
Alabama, USA
July 21, 2014 (Monday); 03:40pm - 05:40pm
(LOCATION: Silver Room)**
- NOTE the room change - Also only a subset of Session 2-ESA is listed here (only the parts that are of potential interest to the ICWN attendees).
- 03:40 - 04:00pm: Embedded MTT-DAS Application Prototyping on an FPGA Based Multiprocessor Architecture
Benaoumeur Senouci, Smail Niar
University of Burgundy, LE2I Laboratory, Dijon, France;
University of Valenciennes Hainaut-Cambresis, Valenciennes, France
- 04:00 - 04:20pm: Reducing DDR Latency for Embedded Image Steganography
James Haralambides, Lukas Bijaminas
Barry University, Miami Shores, Florida, USA
- 04:20 - 04:40pm: Dynamic-prelink: An Enhanced Prelinking Mechanism without Modifying Shared Libraries
Hyungjo Yoon, Changwoo Min, Young Ik Eom
Sungkyunkwan University, Korea; Samsung Electronics, Korea
- 04:40 - 05:00pm: XXX FREE SLOT
- 05:00 - 05:20pm: Hardware/Software Co-design of Particle Filter in Grid Based Fast-SLAM Algorithm
B. G. Sileshi, C. Ferrer, J. Oliver
Universitat Autònoma de Barcelona, Bellaterra (Barcelona), Spain;
Institut de Microelectrònica de Barcelona (CNM-CSIC), Bellaterra (Barcelona), Spain

- 05:20 - 05:40pm:** A Cognitive Approach for Stroke Rehabilitation by Acute Hand Monitoring
R. Hema Barathi, D. Ramya Priyadarshini, K. Sowmya, M. Ramalatha
Department of Information Technology, Kumaraguru College of Technology, Coimbatore, India
- 06:00 - 09:00pm:** TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)
- 09:00 - 11:45pm:** CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 2-ICWN: SENSOR NETWORKS AND APPLICATIONS + RELATED ISSUES
XXX Chair: Dr. Hui Liu; Missouri State University, Missouri, USA
July 22, 2014 (Tuesday); 08:00am - 10:20am
(LOCATION: Platinum Room)

08:00 - 08:20am: A Software Update Method Using Clustering WSNs
 Hyeyeong Jeong, Byoungchul Ahn
 Yeungnam University, Gyeongsan, South Korea

08:20 - 08:40am: Packet Loss Resilience Lighting Control for Wireless
 Sensor Networks
 Yushi Uchimura, Hiroto Aida, Ryoga Okunishi, Yo Motoya,
 and Mitsunori Miki
 Doshisha University, Kyoto, Japan

08:40 - 09:00am: Performance Analysis of IEEE 802.15.4 For Intra-Vehicle
 Wireless Networks
 Utayba Mohammad
 University of Detroit Mercy, Detroit, Michigan, USA

09:00 - 09:20am: Time Synchronization Protocol Using Lighting Control for
 Wireless Sensor Network
 Shoichi Nagamitsu, Hiroto Aida, Ryoga Okunishi, Yo Motoya,
 and Mitsunori Miki
 Doshisha University, Kyoto, Japan

09:20 - 09:40am: Lifetime Extension Algorithms for the Connected Sensor Cover
 Daisuke Matsumoto, Akihiro Fujiwara
 Kyushu Institute of Technology, Japan

09:40 - 10:00am: Detecting Boundary Nodes in WSN
 Nihel Senouci, Moustafa Kouider El Ouahed, Haffaf Hafid
 University of Oran, Algeria

10:00 - 10:20am: An Energy Efficient Routing Algorithm Based on Centers of
 Local Clustering in Wireless Sensor Networks
 Chung Sei Rhee
 Chungbuk National University, South Korea

10:20 - 10:40am: BREAK

**SESSION 3-ICWN: WIRELESS NETWORKS AND SECURITY ISSUES + IOT + BROADCASTING
 AND TELE-CONTROL SYSTEMS**
**XXX Chairs: Harminder Singh Bindra; Malout Institute of
 Management and Information Technology, India**
July 22, 2014 (Tuesday); 10:40am - 12:40pm
(LOCATION: Platinum Room)

10:40 - 11:00am: Hierarchical-Based Measurement of Situation Awareness in
 the Internet of Things
 Audrey Gendreau, Rita M. Barrios
 Saint Leo University, Saint Leo, Florida, USA;
 University of Detroit Mercy, Detroit, Michigan, USA

11:00 - 11:20am: Investigating Performance of Extended Epidemic Routing Protocol
 of DTN under Routing Attack
 Harminder Singh Bindra, A. L. Sangal
 Dr. B R Ambedkar National Institute of Technology, India;
 DAV Institute of Engineering and Technology, India

- 11:20 - 11:40am: **TinyWatermark: A Code Obfuscation-based Software Watermarking Framework for Wireless Sensor Networks**
Emanuele N. De L. F. Jorge, Luci Pirmez, Rafael De O. Costa, Igor L. Dos Santos, Claudio M. De Farias, Davidson R. Boccardo, and Luiz F. R. Da C. Carmo
Programa de Pos-Graduacao em Informatica Instituto Tercio Paccitti / Instituto de Matematica Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil; Instituto Nacional de Metrologia, Normalizacao e Qualidade Industrial, Brazil
- 11:40 - 12:00pm: **Source-Location Privacy Protection in Wireless Sensor Networks Using AZR Routing**
Zhiwen Zeng, Meili Zeng, Zhigang Chen, Min Zhao, Hui Liu
School of Information Science and Engineering, Central South University, Changsha, P. R. China;
Department of Computer Science, Missouri State University, Springfield, Missouri, USA
- 12:00 - 12:20pm: **Performance Analysis of Broadcasting Real-Time Data Placement over Wireless Multi-Channels**
Ding-Jung Chiang, Ching-Sheng Wang, Chien-Liang Chen
Department of Digital Multimedia Design, Taipei Chengshih University of Science and Technology, Taipei, Taiwan, R.O.C.;
Department of Computer Science and Information Engineering, Aletheia University, Taipei, Taiwan, R.O.C.
- 12:20 - 12:40pm: **Joint of Feedback and Feedforward Controller on Application to Wireless Tele-Control System Considering Uncertainty**
Faramarz Alsharif, Shiro Tamaki, Katsumi Yamashita, Tustomu Nagado, Mohammad Reza Alsharif, Heung Gyoon Ryu
University of the Ryukyus, Japan; Osaka Prefecture University, Japan; Chungbuk National University, South Korea
- 12:40 - 01:40pm: **LUNCH (On Your Own)**
- SESSION 6-SAM: COMPUTER AND HARDWARE SECURITY**
Co-Chairs: Dr. Nicolas Sklavos, Technological Educational Institute of Western Greece, Greece;
Dr. Samuel Ndueso John, Covenant University, Nigeria
July 22, 2014 (Tuesday); 01:40am - 02:20pm
(LOCATION: Ballroom 2)
- NOTE the room change - Also only a subset of Session 6-SAM is listed here (only the parts that are of potential interest to the ICWN attendees).
- 01:40 - 02:00pm: **Autonomic Intrusion Detection System in Cloud Computing with Big Data**
Kleber M. M. Vieira, Fernando Schubert, Guilherme A. Geronimo, Rafael de Souza Mendes, Carlos B. Westphall
The Federal University of Santa Catarina (UFSC), Santa Catarina, Brazil
- 02:00 - 02:20pm: **Fourier Transform as Feature Extraction for Malware Classification**
Stanislav Ponomarev, Nathan Wallace, Travis Atkison
Louisiana Tech University, Ruston, Louisiana, USA

SESSION 7-SAM: SPECIAL TRACK ON IOT AND SCADA CYBERSECURITY EDUCATION
Chair: Prof. George Markowsky; Professor & Associate Director, School of Computing & Information Science, University of Maine, Orono, Maine, USA
July 22, 2014 (Tuesday); 02:20pm - 03:00pm
(LOCATION: Ballroom 2)

NOTE the room change - Also only a subset of Session 7-SAM is listed here (only the parts that are of potential interest to the ICWN attendees).

02:20 - 02:40pm: MODBUS Covert Channel
Carlos Leonardo, Daryl Johnson
Networking, Security & Systems Administration, Rochester Institute of Technology, Rochester, New York, USA

02:40 - 03:00pm: A Behavior-Based Covert Channel in a MMQ
Brian Rowe, Daryl Johnson
Networking, Security & Systems Administration, Rochester Institute of Technology, Rochester, New York, USA

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-ICWN
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)

03:40 - 04:20pm: GENERAL INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)

04:20 - 06:00pm: GENERAL PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 4-ICWN: WIRELESS NETWORKS AND SECURITY ISSUES + IOT AND AD-HOC NETWORKS, VANET, NOVEL ALGORITHMS, PROTOCOLS AND RELATED TECHNOLOGIES + ENERGY EFFICIENCY ISSUES**
XXX Co-Chairs: Dr. Audrey A. Gendreau; Saint Leo University, Florida, USA;
Prof. Devi Chadha; Indian Institute of Technology, Delhi, India;
Dr. Samuel Ndueso John; Head of Dept., Covenant University, Nigeria
July 23, 2014 (Wednesday); 08:00am - 12:40pm
(LOCATION: Platinum Room)
- 08:00 - 08:20am: Applying TCP Profiling to Detect Wireless Rogue Access Point (AP)
James Yu
DePaul University, Chicago, Illinois, USA
- 08:20 - 08:40am: One-time Pad Cipher Based on Out-Key Distribution
Shengyuan Wu
Shandong University, Jinan, P. R. China
- 08:40 - 09:00am: Ultra High Video Data Compression for Android Devices Using OpenCV and other Open-Source Tools
Ronald Yu, Tong Lai Yu
University of California, Irvine, California, USA;
California State University, San Bernardino, California, USA
- 09:00 - 09:20am: Self-aligning Wireless Communication for First Responder Organizations in Interoperable Emergency Scenarios
Peter Dorfinger, Georg Panholzer, Ferdinand Von Tuellenburg, Massimo Cristaldi, Giovanni Tusa, Franz Boehm
Salzburg Research Forschungsgesellschaft mbH, Salzburg, Austria;
Intelligence for Environment & Security - IES Solutions, Catania, Italy; Roofnode, Unterrabnitz, Austria
- 09:20 - 09:40am: UWB Antenna Equalization of Pulse Modulation for IEEE 802.15.4a UWB PHY
Loay Khalaf
The University of Jordan, Amman, Jordan
- 09:40 - 10:00am: Wireless-Aware Congestion Control for Transmission over Heterogeneous Networks
Jyun-Siou Fan, Sheng-Shuen Wang, Hsu-Feng Hsiao
National Chiao Tung University, Taiwan, R.O.C.
- 10:00 - 10:20am: Performance Improvement in Subcarrier QAM Free Space Optical Links in the Presence of Atmospheric Turbulence and Pointing Error with Spatial Diversity and Beam Optimization
D. Chadha, Bhaskar Chakravarty
Indian Institute of Technology, Delhi, India
- 10:20 - 10:40am: BREAK**
- 10:40 - 11:00am: Design of the TDMA Baseband Modem for Voice Relay
Yeonbo Kim, Yong-Wook Bae, Byoungchul Ahn
Daegu University, Gyungsan, South Korea; Kyungwoon University, Gumi, South Korea; Yeungnam University, Gyungsan, South Korea
- 11:00 - 11:20am: Analysis of Handover Based on the Use of Femtocells in LTE Networks
Ketyllen Da Costa Silva, Carlos P. Alves da Silva, Andre C. de Sousa Donza, Carlos Renato Frances, Nandamudi L. Vijaykumar
Federal University of Para, Belem, Brazil;
National Institute for Space Research, Sao Jose dos Campos, Brazil

- 11:20 - 11:40am: A Simulation Study of Effect of MPLS on Latency over a Wide Area Network (WAN)
Adewale Adeyinka A., John Samuel N., Ndujiuba Charles
Covenant University, Ota, Ogun State, Nigeria
- 11:40 - 12:00pm: A New Power Saving Routing Algorithm for Delay Tolerant Networks
Azadeh Omidvar, Karim Mohammadi
Iran University of Science and Technology, Tehran, Iran
- 12:00 - 12:20pm: Energy-efficient Heuristics for Multi Hop Routing in People-centric Environments
Antonio Junior, Rosario Ribeiro, Tercio Filho, Dalton Matsuo, Marcos Batista, Claudio Souza, Jose-Ricardo Ribeiro
University Federal of Goias (UFG), Brazil;
Centro Universitario de Goias - Uni-ANHANGUERA, Brazil
- 12:20 - 12:40pm: QoS-Based Power-Efficient Resource Management for LTE-A Networks with Relay Nodes
Kai-Ten Feng
National Chiao Tung University, Taiwan, R.O.C.
- 12:40 - 01:20pm: LUNCH (On Your Own)**
- SESSION 11-SAM: SECURITY MANAGEMENT II + SECURITY EDUCATION**
Chair: Dr. Diala Abi Haidar; Dar Al Hekma University, Saudi Arabia
July 23, 2014 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Ballroom 2)
- 01:20 - 01:40pm: Security Management of Bring-Your-Own-Devices
Sara Gallotto, Weifeng Chen
Southern New Hampshire University, Manchester, New Hampshire, USA;
California University of Pennsylvania, California, Pennsylvania, USA
- 01:40 - 02:00pm: SIPPA Approach Towards a Privacy Preserving Voice-based Identity Solution
Bon K. Sy
Queens College & University Graduate Center, Flushing, New York, USA
- 02:00 - 02:20pm: Creating a Policy Based Network Intrusion Detection System Using Java Platform
Samuel N. John, Charles U. Ndujiuba, Robert E. Okonigene, Chinonso E. Okereke, Miebaka E. Wakama
Covenant University, Ogun State, Nigeria;
Ambrose Alli University, Edo State, Nigeria
- 02:20 - 02:40pm: LearnFire: A Firewall Learning Tool for Undergraduate Cybersecurity Courses
Alicia Kirkland, Jens Mache
Lewis & Clark College, Portland, Oregon, USA
- 02:40 - 03:00pm: Teaching Cybersecurity to Wide Audiences with Table-Top Games
Tadhg Fendt, Jens Mache
Lewis & Clark College, Portland, Oregon, USA

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-ICWN
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)

03:40 - 05:40pm: During this period, ICWN attendees are encouraged to participate in sessions belonging to SAM'14, ESA'14, FECS'14, GCA'14, ICOMP'14, or PDPTA'14 conferences. These sessions discuss topics that significantly overlap the scope of ICWN'14.

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

**SESSION 5-ICWN: OPTIMIZATION METHODS + GRID ARCHITECTURES + SENSOR NETWORKS +
CONTEXT AWARE NETWORKING + TCP + SECURITY**
Chairs: TBA
July 24, 2014 (Thursday); 08:00am - 12:20pm
(LOCATION: Platinum Room)

NOTE: We anticipate a number of speaker no-shows for this track; this is due to potential delay in obtaining US visa, non registration, ... In cases of no-shows, the presentations can be moved up in order to close time gaps in the session.

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: FREE SLOT

08:40 - 09:00am: XXX FREE SLOT

09:00 - 09:20am: XXX A Transmission Parameter Optimization Scheme for GA-based Cognitive Engines
 XXX Keunhong Chae, Huaping Liu, Seokho Yoon
 Sungkyunkwan University, Suwon, Korea;
 XXX Oregon State University, Corvallis, Oregon, USA

09:20 - 09:40am: Performance Evaluation of NeBuST-wide Burst Sensor Data Transmission Protocol
 Hiroaki Higaki
 Tokyo Denki University, Tokyo, Japan

09:40 - 10:00am: Performance Evaluation of a Layered WSN Using AODV and MCF Protocols in NS-2
 Apoorva Dasari, Mohamed El-Sharkawy
 Purdue school of Engineering and Technology, USA

10:00 - 10:20am: Smart and Context Aware Networking for University Campus
 Ghassan Kbar, Akshay Bahatia, Wathiq Mansoor
 Riyadh Techno Valley, Riyadh, Kingdom of Saudi Arabia;
 American University in Dubai, Dubai

10:20 - 10:40am: BREAK

10:40 - 11:00am: Energy Conserving Cooperative Caching Technique for Wireless Multimedia Sensor Networks
 Narottam Chand
 National Institute of Technology, Hamirpur, India

11:00 - 11:20am: Energy Efficient Cluster Based Routing Using Time Series Prediction in Wireless Sensor Networks
 Surender Kumar Soni
 National Institute of Technology, Hamirpur, India

11:20 - 11:40am: Cluster Head Centric Cooperative Caching in Wireless Sensor Networks
 Ashok Kumar
 National Institute of Technology, Hamirpur, India

11:40 - 12:00pm: Comparison Study Between TCP, UDP and RTP Protocols - Instant Messaging and Conferencing Systems Design
Bashar M. Nema, Maisaa A. Atya
Ministry of Higher Education, Baghdad, Iraq;
Mustansaryiah University, Baghdad, Iraq

12:00 - 12:20pm: Development of a Secure Network System for Complex Networks
Johnson Uche Olu-Egbuniwe
Girne American University, Turkey

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

SESSION 13-ESA: NETWORK ON CHIP + EMBEDDED SYSTEMS AND APPLICATIONS
XXXX Chairs: David O. Jegede; University of Manitoba, Canada
July 24, 2014 (Thursday); 01:20pm - 02:00pm
(LOCATION: Silver Room)

NOTE the room change.

01:20 - 01:40pm: A Primer for Mapping Techniques on NoC Systems
Maribell Sacanamboy, Freddy Bolanos
Computer Sciences and Electronics Department, Pontificia
Universidad Javeriana - Cali, Colombia; Electrical Engineering
and Automatics Department, National University of Colombia,
Medelln, Colombia

01:40 - 02:00pm: Intelligent Assistive Device To Monitor The Ankle-Foot Orthosis
S. Vengateswaran, V. Ramani, M. Ramalatha
Department of Information Technology, Kumaraguru College of
Technology, Coimbatore, India

02:00 - 05:40pm: **During this period, ICWN attendees are encouraged to participate in sessions belonging to SAM'14, ESA'14, FECS'14, GCA'14, ICOMP'14, or PDPTA'14 conferences. These sessions discuss topics that significantly overlap the scope of ICWN'14.**

IKE'14 & GEM'14 CONFERENCE SCHEDULES

The 2014 International Conference on Information & Knowledge Engineering (IKE'14)

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The 2014 International Conference on Genetic & Evolutionary Methods (GEM'14)

Because of partial topical and technical overlap between IKE'14 and GEM'14 tracks, the schedule of GEM'14 is merged with the schedule of IKE'14, resulting a comprehensive schedule. It is hoped that this would encourage the participants of the two conferences to explore cross-fertilization of ideas. There are also a number of other sessions (not listed as part of these two conferences) that are of potential interest to IKE'14 and GEM'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, sessions in ICAI'14, DMIN'14, ABDA'14, ICOMP'14, and EEE'14 conferences discuss topics that are within the scope of IKE'14 and GEM'14; these have been scheduled so that selected IKE'14 and GEM'14 attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:**
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:**
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:**
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:**
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:20p: LUNCH (On Your Own)**
- 01:20 - 03:00pm: During this period, IKE'14 and GEM'14 attendees are encouraged**
to participate in sessions belonging to ICAI'14, DMIN'14,
ABDA'14, ICOMP'14, or EEE'14 conferences. These sessions discuss
topics that significantly overlap the scope of IKE'14 and GEM'14.
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-IKE-GEM**
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)
- 03:40 - 04:40pm: During this period, IKE'14 and GEM'14 attendees are encouraged**
to participate in sessions belonging to ICAI'14, DMIN'14,
ABDA'14, ICOMP'14, or EEE'14 conferences. These sessions discuss
topics that significantly overlap the scope of IKE'14 and GEM'14.

- SESSION 1-IKE: PROVISIONAL:**
THIS SESSION MAY HAVE TO BE CANCELLED DUE TO THE POSSIBILITY OF THE SPEAKERS NOT BEING ABLE TO SHOW UP.
TOPIC DECISION + SHARABLE RESEARCH AND METHODS
XXX Chair: Prof. Leon Deligiannidis; Wentworth Institute of Technology, Boston, Massachusetts, USA
July 21, 2014 (Monday); 04:40pm - 05:40pm
(LOCATION: Ballroom 1)
- 04:40 - 05:00pm: Multi Hybrid Keyword Processing for Topic Decision of Unstructured Data
Jinwoo Lee, Hyoungmin Ma, Gitae Lee, Kihong Ahn, Sukyoung Kim
University of National Hanbat, Daejeon, South Korea
- 05:00 - 05:20pm: Reference Integrator: A Workflow for Similarity Driven Multi-sources Publication Merging
Suman Reddy Mallipeddi, Carol M. Lushbough, Etienne Z. Gnimpeba
University of South Dakota, South Dakota, USA
- 05:20 - 05:40pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:00a - 12:00p: During this period, IKE'14 and GEM'14 attendees are encouraged to participate in sessions belonging to ICAI'14, DMIN'14, ABDA'14, ICOMP'14, or EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of IKE'14 and GEM'14.**
- 12:00 - 01:00pm: INVITED LECTURE:
BIG DATA ISSUES FOR MINING KNOWLEDGE IN MAINTENANCE INFORMATION SYSTEMS
Prof. Diego Galar
Division of Operation and Maintenance Engineering, Lulea University of Technology, Lulea, Sweden; Former Pro-Vice-Chancellor, Aragon Institute for Engineering Research (I3A), Aragon, Spain
(LOCATION: Ballroom 1)**
- SESSION 2-IKE: DATA & INFORMATION MINING + FORECASTING METHODS + SIMULATION + CROWD-SOURCING + STOCHASTIC METHODS, VISUALIZATION METHODS
XXX Co-Chairs: Dr. Deok Hee Nam; Wilberforce University, Ohio, USA;
Prof. Leon Deligiannidis; Wentworth Institute of Technology, Boston, Massachusetts, USA
July 22, 2014 (Tuesday); 01:00pm - 03:00pm
(LOCATION: Ballroom 1)**
- 01:00 - 01:20pm: Identification of Compromised Power System State Variables
Nathan Wallace, Stanislav Ponomarev, Travis Atkison
Louisiana Tech University, Louisiana, USA**
- 01:20 - 01:40pm: Multidimensional Scaling Using Neurofuzzy System and Multivariate Analyses
Deok Hee Nam
Engineering and Computing Science, Wilberforce University, Wilberforce, Ohio, USA**
- 01:40 - 02:00pm: Mining the Reviews of Movie Trailers on YouTube and Comments on Yahoo Movies
Li-Chen Cheng, Chi Lun Huang
Department of Computer Science and Information Management, Soochow University, Taipei, Taiwan, R.O.C.**
- 02:00 - 02:20pm: Segment, Synthesize and Repeat: CARP Paradigm for Consumption of Digital Content
Indu Anand, Anurag Wakhlu
Sushila Publications, Chelmsford, Massachusetts, USA;
Coloci Inc., Chelmsford, Massachusetts, USA**
- 02:20 - 02:40pm: Modeling File-Share Server Utilization Using Stochastic Techniques
Margret T. Martin, Sarah G. Nurre, Michael R. Grimaila
Air Force Institute of Technology, USA**
- 02:40 - 03:00pm: Interactive Visualization of Business Births and Deaths in the U.S. Economy Using a Novel Visualization Technique Called HiFi Pie
Leonidas Deligiannidis And Erik Noyes
Wentworth Institute of Technology, Boston, Massachusetts, USA;
Babson College, Babson Park, Massachusetts, USA**
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-IKE-GEM
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)**

- SESSION 3-GEM: GENETIC ALGORITHMS & APPLICATIONS + GENETIC PROGRAMMING + OPTIMIZATION METHODS**
Chairs: TBA
July 22, 2014 (Tuesday); 03:40pm - 05:40pm
(LOCATION: Ballroom 1)
- 03:40 - 04:00pm: The Parallelization of Two Constrained Optimization Problems Using Evolutionary Algorithms
Michael Scherger, Roja Ramani Molupoju
Texas Christian University, Fort Worth, Texas, USA;
Texas A&M University - Corpus Christi, Texas, USA
- 04:00 - 04:20pm: Improving the Multi-Restart Local Search Algorithm by Permutation Matrices and Sorted Completion Times for the Flow Shop Scheduling Problem
Juan C. Seck Tuoh Mora, Luis Garcia Lechuga, Joselito Medina Marin, Norberto Hernandez Romero, Eva S. Hernandez Gress
Area Academica de Ingenieria, Universidad Autonoma del Estado de Hidalgo, Mexico
- 04:20 - 04:40pm: Design of a PID Control Gains for a Robotic Manipulator Under Parametric Uncertainties by Using DE-SQP Algorithm
Miguel Gabriel Villarreal-Cervantes
Instituto Politecnico Nacional, CIDETEC, Mexico
- 04:40 - 05:00pm: Optimal Selection of Milling Parameters for Maximum Profit Rate by Genetic Algorithms
Libao An, Peiqing Yang, Hong Zhang
College of Mechanical Engineering, Hebei United University, Tangshan, P. R. China
- 05:00 - 05:20pm: Direction of Arrival Estimation Using Particle Swarm Optimization-based SPECC
In-Sik Choi
Hannam University, South Korea
- 05:20 - 05:40pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the begining of this book for details)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:00a - 12:00p: During this period, IKE'14 and GEM'14 attendees are encouraged to participate in sessions belonging to ICAI'14, DMIN'14, ABDA'14, ICOMP'14, or EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of IKE'14 and GEM'14.**
- 12:00 - 01:00pm: INVITED LECTURE:
DATA SCIENCE EMERGENCE
Dr. Peter Geczy
National Institute of Advanced Industrial Science and Technology
AIST, Japan; Institute of Physical & Chemical Research (RIKEN);
Research Center for Future Technologies
(LOCATION: Ballroom 1)**
- SESSION 4-GEM: SIMULATED ANNEALING, SWARM OPTIMIZATION ALGORITHMS + AGENT-BASED ALGORITHMS + EVOLUTIONARY ALGORITHMS + ANN + FORECASTING METHODS
XXX Co-Chairs: Dezhi (Derek) Li; University of Waterloo, Canada;
Shachi Singh; University of Manitoba, Canada
July 23, 2014 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Ballroom 1)**
- 01:20 - 01:40pm: A Novel Autoregressive Model for System State Prediction
Dezhi Li, Fathy Ismail, Wilson Wang
University of Waterloo, Waterloo, ON, Canada;
Lakehead University, ON, Canada**
- 01:40 - 02:00pm: Optimized Path Planning for a Mobile Real Time Location System (mRTL) in an Emergency Department
S. Singh, M. R. Friesen, R. D. McLeod
University of Manitoba, Canada**
- 02:00 - 02:20pm: Enhancement Of Power Quality Through Particle Swarm Optimization
L. Ravi Srinivas, B. Mahesh Babu, S. S. Tulasi Ram
Gudlavalleru Engineering College, India;
JNTUH, Hyderabad, India**
- 02:20 - 02:40pm: Evolmusic - A Preference Learning Accompanist
Shu Zhang, Roi Ceren, Khaled Rasheed
University of Georgia, Athens, Georgia, USA**
- 02:40 - 03:00pm: Evolution of Event and Delay Controlled Neural Network for Locomotion
Maria Shirshova, Mikhail Burtsev
National Research Center "Kurchatov Institute", Moscow, Russia**
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-IKE-GEM
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)**
- SESSION 5-IKE: SEARCH METHODS + DATA MODELS + FORECASTING METHODS + AGENT TECHNOLOGIES AND APPLICATIONS + IMAGING SCIENCE
XXX Chair: Tahia Infantes Morris; R&D Product and Technology Development,
Vistakon, Division of Johnson & Johnson Vision Care, Inc., USA
July 23, 2014 (Wednesday); 03:40pm - 05:40pm
(LOCATION: Ballroom 1)**
- 03:40 - 04:00pm: Efficient Image Segmentation Algorithm for Mobile Apps
Mark Smith
University of Central Arkansas, Conway, Arkansas, USA**

- 04:00 - 04:20pm: Keyword Searches with Customized Preferences
Yu-Chin Liu, Yi-Hsuan Chiang, Yu-Lien Hsieh
Department of Information Management, Shih Hsin University,
Taipei, Taiwan, R.O.C.
- 04:20 - 04:40pm: Ontology Inference Using Spatial and Trajectory Domain Rules
Rouaa Wannous, Jamal Malki, Alain Bouju, Cecile Vincent
L3i Laboratory, University of La Rochelle, France;
LIENSS Lab. & UMR, CNRS, University of La Rochelle, France
- 04:40 - 05:00pm: Large Scale Desalination: A Comparative Cost Affective Economic
Analyses Of Nuclear, Gas and Solar Powered Plants
Mohammed H. S. Al Ashry
Shaghra University, Saudi Arabia
- 05:00 - 05:20pm: Multi-Projects Scheduling Via Non-cooperative Agents Through
Heterogeneous Multiprocessor Systems For Energy Efficiency
Marjan Abdeyazdan
Department of Computer Engineering, Islamic Azad University,
Mahshahr, Iran
- 05:20 - 05:40pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 6-IKE: INFORMATION, KNOWLEDGE ENGINEERING & MANAGEMENT + FEATURE EXTRACTION AND ARTIFICIAL INTELLIGENCE**
Chairs: TBA
July 24, 2014 (Thursday); 08:00am - 10:20am
(LOCATION: Ballroom 1)
- 08:00 - 08:20am: XXX Agent Based Emergency Response Cognition Model
 Safiye Sencer, Orhan Torkul, Kutlu Eren
 Sakarya University, Turkey
- 08:20 - 08:40am: The Management of Project Knowledge in a Research Organisation: Theory and Practice
 Shahram Sokhanvar, Judy Matthews, Prasad Yarlagadda
 Queensland University of Technology, Australia
- 08:40 - 09:00am: An Approach to Multimedia Content Management
 Giulio Concas, Filippo Eros Pani, Simone Porru
 Department of Electrics and Electronics Engineering,
 University Of Cagliari, Piazza d'Armi, Cagliari, Italy
- 09:00 - 09:20am: Collaborative Shared Awareness: Human-AI Collaboration
 James A. Crowder, John Carbone
 Raytheon Intelligence, Information and Services, Aurora,
 Colorado, USA
- 09:20 - 09:40am: Face Recognition with Image Feature Weights and Least Mean Square Learning Approach
 Wei-Li Fang, Ying-Kuei Yang, Jung-Kuei Pan
 National Taiwan University of Science & Technology, Taipei,
 Taiwan, R.O.C.
- 09:40 - 10:00am: A Knowledge Based Selection Framework for Cloud Services
 Gulfem Isiklar Alptekin, S. Emre Alptekin
 Galatasaray University, Istanbul, Turkey
- 10:00 - 10:20am: Towards a Knowledge Transfer Measurement for Software Requirements
 Jose Jairo Camacho, Jenny Marcela Sanchez-Torres, and
 Ernesto Galvis-Lista
 Universidad Nacional de Colombia, Colombia;
 Universidad del Magdalena, Colombia
- 10:20 - 10:40am: BREAK**
- 10:40a - 05:40p: During this period, IKE'14 and GEM'14 attendees are encouraged to participate in sessions belonging to ICAI'14, DMIN'14, ABDA'14, ICOMP'14, or EEE'14 conferences. These sessions discuss topics that significantly overlap the scope of IKE'14 and GEM'14.**

IPCV'14 CONFERENCE SCHEDULE

The 2014 International Conference on Image Processing, Computer Vision, & Pattern Recognition

There are a number of other sessions (not listed as part of IPCV'14 in this schedule) that are of potential interest to IPCV'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, some sessions in MSV'14, DMIN'14, ABDA'14, FECS'14, ICAI'14, and GEM'14 conferences discuss topics that are within the scope of IPCV'14; these have been scheduled so that selected IPCV'14 groups/attendees can also participate in them.

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July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:**
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:**
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:**
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:**
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)**
- SESSION 1-IPCV: COMPUTER VISION AND APPLICATIONS**
XXX Co-Chairs: Prof. Kyota Aoki; Utsunomiya University, Japan;
Dr. Hany A. Elsalamony; Helwan University, Cairo, Egypt
July 21, 2014 (Monday); 01:00pm - 03:00pm
(LOCATION: Gold Room)
- 01:00 - 01:20pm: FREE SLOT**
- 01:20 - 01:40pm: Automated Hair Color Determination**
Daniel S. Rosen, Cambron Carter
GumGum Inc., Santa Monica, California, USA
- 01:40 - 02:00pm: An Algorithm for Mobile Vision-Based Localization of Skewed**
Nutrition Labels that Maximizes Specificity
Vladimir Kulyukin, Christopher Blay
Utah State University, Logan, Utah, USA
- 02:00 - 02:20pm: Traffic Control by Digital Imaging Cameras**
Loay Khalaf, Rowa Jamal, Karmel Manna, Maram Rabee
The University of Jordan, Jordan

02:20 - 02:40pm: An Orange Sorting Technique Based on Size and External Defects
Naeem Sattar, Sheikh Ziauddin, Sajida Kalsoom,
Ahmad R. Shahid, Rafi Ullah, Amir H. Dar
COMSATS Institute of Information Technology, Pakistan

02:40 - 03:00pm: An Algorithm for In-Place Vision-Based Skewed 1D Barcode
Scanning in the Cloud
Vladimir Kulyukin, Tanwir Zaman
Utah State University, Logan, Utah, USA

03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION A-IPCV**
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)

- 0. Similarity Measures for Fingerprint Matching
Kareem K. A. Ghany, Aboul Ella Hassanien, Gerald Schaefer
Beni Suef University, Egypt; Cairo University, Egypt;
Loughborough University, UK
- 0. Motion Analysis of Horse-Rider for Coaching System
Jae Neung Lee, Myung-Won Lee, Yeong-Hyeon Byeon, and
Keun-Chang Kwak
Chosun University, Gwangju, South Korea
- 0. Real-time 3D Hand Pointing Using Depth Image
Sung-Il Joo, Sun-Hee Weon, Hyung-Il Choi
SoongSil University, Seoul, South Korea
- 0. Method for Correction of Lenses Distortion in Stereo Vision
Joceli Mayer, Osmando Pereira Junior
Federal University of Santa Catarina, Brazil
- 0. Depth-Assisted Error Concealment Algorithm for 3D Video
Pin-Cheng Huang, Gwo-Long Li, Mei-Juan Chen, Kuang-Han Tai
National Dong Hwa University, Hualien, Taiwan, R.O.C.
- 0. Continuous Gesture Recognition Using Hidden Markov Models
Joceli Mayer, Vinicius Breda
Federal University of Santa Catarina, Brazil
- 0. Facial Expressions From Raspberry Pi and Pi Camera
Michel Chapron, Fleuri Adon, Jean-Baptiste Liagre
ETIS, ENSEA, UCP, CNRS, Cergy-Pontoise, France
- 0. ...

SESSION 2-IPCV: BIOMETRICS + FACE RECOGNITION, EXPRESSION DETECTION,
HUMAN DETECTION
XXX Chairs: Prof. Singli Garcia-Otero; Virginia State University,
Petersburg, Virginia, USA
July 21, 2014 (Monday); 03:40pm - 06:00pm
(LOCATION: Gold Room)

03:40 - 04:00pm: Edge Histogram Descriptor for Finger Vein Recognition
Yu Lu, Sook Yoon, Daegyung Hwang, Dong Sun Park
Chonbuk National University, South Korea;
Mokpo National University, South Korea

04:00 - 04:20pm: Finger Vein Recognition in Row and Column Directions Using
Two Dimensional Kernel Principal Component Analysis
Sepehr Damavandinejadmonfared, Vijay Varadharajan
Information and Networked Systems Security Research Group (INSS),
Department of Computing, Macquarie University, Sydney, Australia

04:20 - 04:40pm: Lucas-Kanade Scale Invariant Feature Transform for Uncontrolled
Viewpoint Face Recognition
Yongbin Gao, Hyo Jong Lee
Chonbuk National University, Jeonju, South Korea

- 04:40 - 05:00pm: Effective Kernel Mapping for One-Dimensional Principal Component Analysis in Finger Vein Recognition
Sepehr Damavandinejadmonfared, Vijay Varadharajan
Macquarie University, Sydney, Australia
- 05:00 - 05:20pm: A Facial Expression Recognition System from Depth Video
Md. Zia Uddin, A. M. Jehad Sarkar
Sungkyunkwan University, Seoul, South Korea;
Hankuk University of Foreign Studies, Yongin, South Korea
- 05:20 - 05:40pm: Performance Analysis of Face Detection Algorithms for Efficient Comparison of Prediction Time and Accuracy
Seunghi Cha, Jong Wook Kwak, Byoungchul Ahn, Wookhyun Kim
Yeungnam University, South Korea
- 05:40 - 06:00pm: A Novel SVM Based Pedestrian Detection Algorithm via Locality Sensitive Histograms
Zhihui Wang, Sook Yoon, Changpyo Hong, Dong Sun Park
Chonbuk National University, South Korea;
Mokpo National University, South Korea
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)**
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 3-IPCV: VISION, PATTERN MATCHING, NOISE REDUCTION & APPLICATIONS
XXX Chair: Iulia Stirb; "Politehnica" University of Timisoara, Romania
July 22, 2014 (Tuesday); 08:00am - 10:20am
(LOCATION: Gold Room)

08:00 - 08:20am: SEM Surface Reconstruction Using Optical Flow and Stereo Vision
 J. C. Henao, J. Meunier, J. B. Gomez- Mendoza, S. Roy, and J. C. Riano-Rojas
 Universidad Nacional de Colombia, Colombia;
 Universite de Montreal, Canada

08:20 - 08:40am: Reliability Measure of 2D-PAGE Spot Matching Using Multiple Graphs
 Dae-Seong Jeoune, Chan-Myeong Han, Yun-Kyoo Ryoo, Wookhyun Kim, Young-Woo Yoon
 Daegu Future College; M+VISION Co. Ltd.; Daegu Health College; Yeungnam Univ., Republic of Korea, South Korea

08:40 - 09:00am: Distortion Center Estimation Technique Using the FOV Model and 2D Patterns
 Dae Hyuck Park, Jeong Goo Seo, Haijung Choi, Eui Sun Kang
 SANE CO., Ltd., Seoul, South Korea

09:00 - 09:20am: Automatic Segmentation of Coronal Mass Ejections from STEREO White-light Coronagraph Images
 Vladimir Kirnosov, Lin-Ching Chang, Antti Pulkkinen
 The Catholic University of America, Washington, D.C., USA;
 NASA Goddard Space Flight Center, Greenbelt, Maryland, USA

09:20 - 09:40am: Automated Area Defect Inspection Of Touch Panels Using Computer Vision
 Hong-Dar Lin, Jen-Miao Li
 Chaoyang University of Technology, Taichung, Taiwan, R.O.C.

09:40 - 10:00am: Denoising Camera Data: Shape-adaptive Noise Reduction for Color Filter Array Image Data
 Tamara Seybold, Bernd Klassner, Walter Stechele
 Arnold & Richter Cine Technik, Turkenstrasse, Munchen, Germany; Technische Universitat Munchen, Arcisstrasse, Munchen, Germany

10:00 - 10:20am: DT-Binarize: A Hybrid Binarization Method Using Decision Tree for Protein Crystallization Images
 Imren Dinc, Semih Dinc, Madhav Sigdel, Madhu S. Sigdel, Marc L. Pusey, Ramazan S. Aygun
 University of Alabama in Huntsville, Alabama, USA;
 iXpressGenes Inc., Huntsville, Alabama, USA

10:20 - 10:40am: BREAK

SESSION 4-IPCV: IMAGING SCIENCE AND MEDICAL APPLICATIONS
XXX Chair: Prof. Kyota Aoki; Utsunomiya University, Japan
July 22, 2014 (Tuesday); 10:40am - 12:20pm
(LOCATION: Gold Room)

10:40 - 11:00am: Estimation of Resected Liver Regions Using a Tumor Domination Ratio
 Masanori Hariyama, Moe Okada, Mitsugi Shimoda, Keiichi Kubota
 Tohoku University, Japan;
 Second Department of Surgery, Dokkyo Medical University, Japan

- 11:00 - 11:20am: Sickl Anemia and Distorted Blood Cells Detection Using Hough Transform Based on Neural Network and Decision Tree
Hany A. Elsalamony
Helwan University, Cairo, Egypt
- 11:20 - 11:40am: Rebuilding IVUS Images From Raw Data Of The RF Signal Exported by IVUS Equipment
Marco Aurelio Granero, Eduardo Tavares Costa, and Marco Antonio Gutierrez
Departament of Biomedical Engineering DEB/FEEC/UNICAMP, Brazil; Division of Informatics/Heart Institute HCFMUSP, Sao Paulo, Brazil; Federal Institute of Education, Science and Technology S. Paulo IFSP, Sao Paulo, Brazil
- 11:40 - 12:00pm: Image Segmentation Techniques Applied to Point Clouds of Dental Models with an Improvement in Semi-Automatic Teeth Segmentation
Juan David Tamayo Quintero, Sebastian Arboleda Duque, and Juan Bernardo Gomez Mendoza
Universidad Nacional de Colombia, Colombia
- 12:00 - 12:20pm: Correction of Intensity Nonuniformity in Mammographic Images
S. Yazdani, R. Yusof, A. Karimian, A. Hematian
University Teknologi Malaysia, Kuala Lumpur, Malaysia; University of Isfahan, Isfahan, Iran;
- 12:20 - 01:20pm: **LUNCH (On Your Own)**
- SESSION 5-IPCV: IMAGE AND SIGNAL PROCESSING APPLICATIONS & NOVEL ALGORITHMS**
XXX Chair: Prof. Paul Marjoram; University of Southern California, USA
July 22, 2014 (Tuesday); 01:20pm - 03:00pm
(LOCATION: Gold Room)
- 01:20 - 01:40pm: Active Surveillance in Public Environments
Timothy Sweet, Mircea Nicolescu
University of Nevada, Reno, Nevada, USA
- 01:40 - 02:00pm: Decision-Level Fusion of Multi-modal Data Using Manifolds
Yassine Belkhouche, Bill Buckles
University of Arkansas at Little Rock, Arkansas, USA; University of North Texas, Texas, USA
- 02:00 - 02:20pm: Applying a Lightweight Chinese Lexical Chain Processing in Web Image Annotation
Chuen-Min Huang
National Yunlin University of Science & Technology, Taiwan, R.O.C.
- 02:20 - 02:40pm: Distances and Kernels Based on Cumulative Distribution Functions
Hongjun Su, Hong Zhang
Armstrong Atlantic State University, Savannah, Georgia, USA
- 02:40 - 03:00pm: Spot Matching Method for the Landmark Matched Pairs Using the Second Neighbor Spots in 2-DE
Chan-Myeong Han, Dae-Sung Jeoune, Sung-Woo Han, Wookhyun Kim, and Young-Woo Yoon
M+VISION Co. Ltd.; Daegu Future College; Taegu Science University; Yeungnam University, Republic of Korea, South Korea

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-IPCV
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)

- 0. Comparison Between the Optimization Techniques of the Image Filters Used to Improve Optical Character Recognition
Iulia Stirb
"Politehnica" University of Timioara, Romania
- 0. Adaptive Fruit and Vegetable Products Recognition Based on Multi-feature Fusion
Tao Huawei, Zou Cairong, Zhao Li
Southeast University, P. R. China
- 0. Local Block-Difference Pattern for Use in Gait-based Gender Classification
Yen-Chi Wang, Chiao-Wen Kao, Ying-Nong Chen, Kuo-Chin Fan
National Central University, Taiwan, R.O.C.
- 0. Increasing the Capacity of Color Print Codes for Robust Communication Over Inkjet Print-scan Channels
Joceli Mayer
Federal University of Santa Catarina - Florianopolis, Brazil
- 0. A Bluetooth Based Mobile SW Platform Application: Smart Finder
Jaejoon Kim, Hong-Mok Choi
Daegu University, Korea
- 0. Video Based Abnormal Behavior Analysis System for Surveillance
Jong-Gook Ko
Electronics and Telecommunications Research Institute (ETRI), South Korea
- 0. Nonconvex Half-Quadratic Image Reconstruction With Wavelet-Domain Sparsity Constraints
Marc C. Robini, Yuemin Zhu
CREATIS, INSA Lyon, Villeurbanne, France
- 0. ...

03:40 - 04:20pm: INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)

04:20 - 06:00pm: PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 6-IPCV: PATTERN RECOGNITION, IMAGE RETRIEVAL METHODS, IMAGE FEATURE EXTRACTION & FEATURE MAPPING, IMAGE SEGMENTATION
Chairs: TBA
July 23, 2014 (Wednesday); 08:00am - 11:20am
(LOCATION: Gold Room)

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: XXX Investigation of Using the Local Directional Pattern for Stereo Corresponding Problem
 Fadl Dahan, Khalid Al-Mutib, Mansour Alsulaiman, Ramdane Hedjar, Mohammed Faisal
 King Saud University, Al-Riyadh, Saudi Arabia

08:40 - 09:00am: Liver Extraction from CT Images Based on Liver Structure Models
 Masanori Hariyama, Riichi Tanizawa, Mitsugi Shimoda, Keiichi Kubota, Yasuhiro Kobayashi
 Tohoku University; Second Department of Surgery, Dokkyo Medical University; Oyama National College of Technology, Japan

09:00 - 09:20am: Genetic Algorithm-Based Image Feature Matching with a Fundamental Matrix
 Jaeyoung Kim, Myeongsu Kang, Heesung Jun, Jong-Myon Kim
 University of Ulsan, Ulsan, South Korea

09:20 - 09:40am: Ratios of Eigenvalues for the Dirichlet Laplacian and Hu's Moments
 Mohamed A. Khabou, Mohamed B. H. Rhouma
 University of West Florida, Pensacola, Florida, USA;
 Qatar University, Doha, Qatar

09:40 - 10:00am: Classification of Protein Crystallization Trial Images Using Geometric Features
 Madhav Sigdel, Madhu S. Sigdel, Imren Dinc, Semih Dinc, Marc L. Pusey, Ramazan S. Aygun
 University of Alabama in Huntsville Alabama, USA;
 iXpressGenes, Inc., Huntsville, Alabama, USA

10:00 - 10:20am: A Content Based Image Retrieval Approach Based on Document Queries
 Ilie Mihai Bogdan
 "Dunarea de Jos" University of Galati, Romania

10:20 - 10:40am: BREAK

10:40 - 11:00am: Enhanced Spatial Fuzzy C-Means Algorithm for Medical Image Segmentation
 Myeongsu Kang, Jaeyoung Kim, Cheol-Hong Kim, Jong-Myon Kim
 University of Ulsan, Ulsan, South Korea;
 Chonnam National University, Gwangji, South Korea

11:00 - 11:20am: Stereo Image Coding Scheme Based Upon Pattern Recognition
 Li Hongsong, Li Da
 Institute of Integrated Circuits & Micro-Nano Devices,
 GUET, P. R. China

SESSION 7-IPCV: IMAGE ENHANCEMENT METHODS, NOISE REDUCTION ALGORITHMS, IMAGE QUALITY ASSESSMENT AND RELATED TECHNOLOGIES
XXX Co-Chairs: Dr. Hany A. Elsalamony; Helwan University, Cairo, Egypt
Prof. Yuriy V. Shkvarko, CINVESTAV-Guadalajara, Mexico
July 23, 2014 (Wednesday); 11:20am - 02:20pm
(LOCATION: Gold Room)

11:20 - 11:40am: Removal of Circular Edge Noise of Retinal Fundus Images
 A. Ektesabi, A. Kapoor
 Swinburne University of Technology, Australia

11:40 - 12:00pm: A New Approach for Removing Haze from Images
 Vinuchackravathy Senthamparasu, Anusha Baskaran, and
 Krishnan Kutty
 Centre for Research in Engineering Sciences and Technology
 (CREST), KPIT Technologies Ltd., Pune, India

12:00 - 12:20pm: Effect of AWGN Parameters Estimation on Accurate
 Denoising Process
 Huda Al-Ghaib, Reza Adhami
 University of Alabama in Huntsville, Alabama, USA

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

01:20 - 01:40pm: XSET: Image Coder Based on Contrast Band-Pass Filtering
 Jaime Moreno, Oswaldo Morales, Ricardo Tejeida
 National Polytechnic Institute of Mexico, Mexico;
 University of Poitiers, Poitiers, France

01:40 - 02:00pm: pSQ: Image Quantizer Based on Contrast Band-Pass Filtering
 Jaime Moreno, Oswaldo Morales, Ricardo Tejeida
 National Polytechnic Institute of Mexico;
 University of Poitiers, Poitiers, France

02:00 - 02:20pm: Feature Enhancement of Robust Adaptive Target Detection
 with the Y-configured Multisensor Imaging Radar
 V. E. Espadas, Y. V. Shkvarko
 CINVESTAV Unidad Guadalajara, Jalisco, Mexico

SESSION 8-IPCV: STEREO, 3D IMAGING, DEPTH ALGORITHMS, VIDEO PROCESSING, ANALYSIS AND APPLICATIONS
Chairs: TBA
July 23, 2014 (Wednesday); 02:20pm - 05:40pm
(LOCATION: Gold Room)

02:20 - 02:40pm: Depth Estimation of a Monocular Image from Image Blur
 Zhonghai Deng, Jingyuan Zhang
 University of Alabama, Alabama, USA

02:40 - 03:00pm: Optimum Image Quality Assessment for 3D Perception of
 Stereoscopic Image Generated from Upsampled Depth Map
 Saeed Mahmoudpour, Manbae Kim
 Kangwon National University, Republic of Korea

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-IPCV
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)

0. Ultrasound Fault Detection of Power Cables Based on
 Morphological Operations in the Bispectrum
 Gabriel Thomas, Arezoo Emadi, Douglas A. Buchanan
 University of Manitoba, Canada

- 0. Mobile Visual Search Applications
Sung-Kwan Je, Seungjae Lee, Weon-Geun Oh
Electronics and Telecommunications Research Institute
(ETRI), South Korea
- 0. CMOS Image Sensor With Reduced Power Consumption Based on
Block Operation
Jeongyeob Kim, Myunghan Bae, Sung-Hyun Jo, Byoung-Soo Choi,
Jang-Kyoo Shin
Kyungpook National University, Daegu, Korea
- 0. Embedded Wavelet-based Face Recognition Under Variable
Position
Pascal Cotret, Stephane Chevobbe, Mehdi Darouich
CEA, LIST, Lab. Calcul Embarque, Gif-sur-Yvette, France
- 0. Digital Image Processing in Surface Engineering Quality Control
E. Sheybani, S. Garcia, G. Javidi
Virginia State University, Virginia, USA
- 0. ...

**SESSION 8-IPCV: Continued ... STEREO, 3D IMAGING, DEPTH ALGORITHMS,
VIDEO PROCESSING, ANALYSIS AND APPLICATIONS
(LOCATION: Gold Room)**

- 03:40 - 04:00pm: A Hole-Filling Approach Based on Morphological Operation for
Stereoscopic Image Generation
Chyuan-Huei Thomas Yang, Yen-Ting Hsu, Wen-Chieh, Chou
Hsuan Chuang University, Hsin Chu, Taiwan, R.O.C.
- 04:00 - 04:20pm: Invariant Feature Extraction Using 3D Silhouette Modeling
Jaehwan Lee, Sook Yoon, Dong Sun Park
Chonbuk National University, Korea;
Mokpo National University, Korea
- 04:20 - 04:40pm: Trajectory Scoring Using JAABA in a Noisy System
H. Chen, B. Foley, P. Marjoram
Department of Preventive Medicine, University of Southern
California, Los Angeles, California, USA
- 04:40 - 05:00pm: Gesture Recognition in Cooking Video Based on Image Features
and Motion Features Using Bayesian Network Classifier
Nguyen Tuan Hung, Nguyen Thanh Binh, Pham The Bao, Jin Young Kim
Ho Chi Minh City, Vietnam; University of Science, Ho Chi Minh
City, Vietnam; Chonnam National University, Gwangju, Korea
- 05:00 - 05:20pm: Improving Performance Using Both of Correlation and Absolute
Difference on Similar Play Estimation
Kyota Aoki, Ryo Aita
Graduate school of Engineering, Utsunomiya University, Japan
- 05:20 - 05:40pm: Subjective Video Streaming Quality Evaluation in 3G Mobile
Cellular Networks
Fahad Al Qurashi, Hamad Almohamedh, Ivica Kostanic
Florida Institute of Technology, Melbourne, Florida, USA
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 09:00pm: **TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 9-IPCV: IMAGE & SIGNAL PROCESSING APPLICATIONS & NOVEL ALGORITHMS
XXX Chair: Daniel S. Rosen; GumGum, Inc., USA
July 24, 2014 (Thursday); 08:00am - 10:00am
(LOCATION: Gold Room)

08:00 - 08:20am: A Heterogeneous Fuzzy Clustering Approach for Reliable Audio Genre Classification
 Junsang Seo, Myeongsu Kang, Cheol-Hong Kim, and Jong-Myon Kim
 University of Ulsan, South Korea;
 Chonnam National University, South Korea

08:20 - 08:40am: An Affine Shape Constraint For Geometric Active Contours
 Mohamed Amine Mezghich, Mawaheb Saidani, Slim M'Hiri, and Faouzi Ghorbel
 GRIFT Research Group, CRISTAL Laboratory, Ecole Nationale des Sciences de l'Informatique, ENSI, Manouba, Tunisia

08:40 - 09:00am: Segmentation of Ancient Documents in Support of Electronic File Management
 Ederson Marcos Sgarbi, Daniela De Freitas Guilhermino Trindade, Wellington Aparecido Della Mura, Jacques Facon
 UENP - Universidade Estadual do Norte do Parana - Centro de Ciencias Tecnologicas, Brazil; PUCPR - Pontificia Universidade Catolica do Parana - PPGIA, Brazil

09:00 - 09:20am: Object Pose Dataset Using Discriminatively Trained Deformable Part Models
 Jinho Kim, Yu Xiang, Silvio Savarese
 Korea Advanced Institute of Science and Technology, Korea; University of Michigan, Ann Arbor, Michigan, USA; Stanford University, Stanford, California, USA

09:20 - 09:40am: HDR Image Appearance Mapping Using Dual Exposed LDR Images
 Hyuk-Ju Kwon, Sung-Hak Lee, Geun-Young Lee, Kyu-Ik Sohng
 Kyungpook National University, Korea

09:40 - 10:00am: Background Invariant Detection of Graphite Responses in OMR Documents
 Raghuvveer Kanneganti, Randy Fry, Ahmed Fadhil, Lalit Gupta
 Southern Illinois University, Carbondale, Illinois, USA

10:00 - 10:20am: BREAK

SESSION 10-IPCV: OBJECT DETECTION, RECOGNITION, AND CLASSIFICATION + OCR, AND RELATED ISSUES + COMPRESSION METHODS & TECHNOLOGIES
Chairs: TBA
July 24, 2014 (Thursday); 10:20am - 12:40pm
(LOCATION: Gold Room)

10:20 - 10:40am: Object Detection And Matching Using Proposed Signature And Surf
 Hany A. Elsalamony
 Helwan University, Cairo, Egypt;
 Salman Bin Abdul Aziz University, Saudi Arabia

10:40 - 11:00am: A Statistical Measuring System for Rainbow Trout
 Marcelo Romero, Jose Manuel Miranda
 Facultad de Ingenieria, Univ. Autonoma del Estado de Mexico, Mexico

- 11:00 - 11:20am: Highlight Image Filter Produces Outstanding Results in Optical Character Recognition Processing
Iulia Stirb
"Politehnica" University of Timisoara, Romania
- 11:20 - 11:40am: Object Tracking Using SIFT and Kalman Filter
Seok-Wun Ha, Yong-Ho Moon
Gyeongsang National University, Gazwa-dong, Jinju, Korea
- 11:40 - 12:00pm: Segmented Compression of Head Shot Photographs
Suhair Amer, Joshua Leonard
Southeast Missouri State University, Missouri, USA
- 12:00 - 12:20pm: Symmetrical Compression of Facial Photographs
Suhair Amer, Joshua Leonard
Southeast Missouri State University, Missouri, USA
- 12:20 - 12:40pm: Image Compression of Colored Facial Photographs: Segmentation and Symmetry-Combined
Suhair Amer, Joshua Leonard
Southeast Missouri State University, Missouri, USA
- 12:40 - 01:20pm: **LUNCH (On Your Own)**

**SESSION 11-IPCV: LATE BREAKING + POSITION PAPERS:
IMAGE PROCESSING, COMPUTER VISION, & PATTERN RECOGNITION
Chairs: TBA
July 24, 2014 (Thursday); 01:20pm - 06:00pm
(LOCATION: Gold Room)**

NOTE: We anticipate a number of speaker no-shows for this track; this is due to potential delay in obtaining US visa, non registration, ... In cases of no-shows, the presentations can be moved up in order to close time gaps in the session.

- 01:20 - 01:40pm: Book Spread Correction Using a Time of Flight Imaging Sensor
Luis Galarza, Zhenzhong Wang, Malek Adjouadi
Florida International University, Miami, Florida, USA
- 01:40 - 02:00pm: Solving Optimization Problems Which Employ Structural Similarity As Fidelity Measure
Daniel Otero, Edward R. Vrscay
University of Waterloo, Ontario, Waterloo, Canada
- 02:00 - 02:20pm: Optical Pedometer: A New Method for Distance Measuring Using Camera Phones
Joakim Sjoberg, Mia Persson
Department of Computer Science, Malmo University, Sweden
- 02:20 - 02:40pm: On Sparse Representation and Visual Tracking
Jingya Wang, Shahram Payandeh
Simon Fraser University, BC, Canada
- 02:40 - 03:00pm: XXX FREE SLOT

- 03:00 - 03:20pm: Adaptive Trilateral Filter For In-Loop Filtering
Akitha Kesireddy, Mohamed El-Sharkawy
Purdue School of Engineering and Technology, USA
- 03:20 - 03:40pm: Low Level Processing for Digital Images
Indiara Barbosa Vale, Gessica Thaianne R. G. Marchiori, Dalton Matsuo Tavares, Tercio Alberto Dos Santos Filho, Ivan Da Silva Sendin, Marcos Aurelio Batista
Federal University of Goias - UFG, Goias, Brazil
- 03:40 - 04:00pm: Image Retrieval: Importance and Applications
Joao Augusto Da Silva Junior, Rodiney Elias Marcal, Antonio Carlos De Oliveira Junior, Tercio Alberto Dos Santos Filho, Sergio Francisco Da Silva, Marcos Aurelio Batista
Federal University of Goias - UFG, Goias, Brazil
- 04:00 - 04:20pm: A 3-D Auto-Stereoscopic Integral Images Generating Tool
Shafik Salih, Amar Aggoun, Maysam Abbod
Brunel University, Uxbridge, West London, UK
- 04:20 - 04:40pm: Fast Detection and Segmentation Of Mitochondria in Electronic Microscopy Images Using Texture and Shape
Zhiming Qian, Meiling Shi
Chuxiong Normal University; Qujing Normal University, China
- 04:40 - 05:00pm: Multi-view Vehicle Detection Using Two-view Features
Zhiming Qian, Meiling Shi
Chuxiong Normal University; Qujing Normal University, China
- 05:00 - 05:20pm: Symmetry Detection Based on Phase Information
Zhitao Xiao, Lei Geng, Fang Zhang, Jun Wu
Tianjin Polytechnic University, Tianjin, P. R. China
- 05:20 - 05:40pm: XXX FREE SLOT
- 05:40 - 06:00pm: Optical Illumination Watermarking Using Db Wavelet
Parvinder Singh, Meenakshi Chhikara
Deenbandhu Chhotu Ram University of Science & Technology, Haryana, India

PDPTA'14 CONFERENCE SCHEDULE

The 2014 International Conference on Parallel and Distributed Processing Techniques and Applications

There are a number of other sessions (not listed as part of PDPTA'14 in this schedule) that are of potential interest to PDPTA'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, some sessions in ABDA'14, ICOMP'14, SAM'14, BIOCOMP'14, CSC'14, GCA'14, ESA'14, and SWWS'14 conferences discuss topics that are within the scope of PDPTA'14; these have been scheduled so that selected PDPTA'14 groups/attendees can also participate in them. In addition, because of topical overlap between PDPTA'14 and tracks of RSA'14 "Reconfigurable Systems and Algorithms", they have been merged into one comprehensive schedule. It is hoped that this would encourage the participants of the RSA'14 track explore cross-fertilization of ideas with participants of PDPTA'14.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:**
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:**
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:**
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:**
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 12:20p: LUNCH (On Your Own)**
- SESSION 1-PDPTA: WORKSHOP: MATHEMATICAL MODELING AND PROBLEM SOLVING, MPS**
Chairs: Prof. Minoru Ito, Nara Institute of Science & Technology, Japan
July 21, 2014 (Monday); 12:20pm - 06:00pm
(LOCATION: Ballroom 5)
- 12:20 - 12:40pm: Acceleration of Poisson Corrupted Image Restoration with Loopy**
Belief Propagation
Hayaru Shouno
University of Electro Communications, Tokyo, Japan
- 12:40 - 01:00pm: Singularity Size Optimization in Data Deduplication Technique**
Mie Ogiwara, Mizuki Takaya, Teruhisa Kasuya, Itaru Koike, Toshiyuki
Kinoshita
School of Computer Science, Tokyo University of Technology, Tokyo, Japan
- 01:00 - 01:20pm: Improvement of a Conformational Search on Protein-ligand Docking Based**
on Optimal Arrangement of Multiple Small Search Grids
Tomohiro Ban, Takashi Ishida, Yutaka Akiyama
Tokyo Institute of Technology, Tokyo, Japan

- 01:20 - 01:40pm: Validation of EEG Personal Authentication with Multi-channels and Multi-tasks
Yu Ishikawa, Chinami Yoshida, Masami Takata, Kazuki Joe
Nara Women's University, Kitauoya-Nishi, Nara, Japan
- 01:40 - 02:00pm: Emotion Estimation of Comments on Web News by SVM and Naive Bayes Based Classifier
Yasuhiro Tajima, Genichiro Kikui
Okayama Prefectural University, Okayama, Japan
- 02:00 - 02:20pm: Grobner Basis of Non-Negative Matrix Factorization and Feature Extraction of Cross-Site Scripting Attacks
Takeshi Matsuda
Shizuoka Institute of Science and Technology, Shizuoka, Japan
- 02:20 - 02:40pm: Accelerating the Numerical Computation of Positive Roots of Polynomials Using Improved Bounds
Kinji Kimura, Takuto Akiyama, Hiroyuki Ishigami, Masami Takata, Yoshimasa Nakamura
Kyoto University, Kyoto, Japan; Nara Women's University, Nara, Japan
- 02:40 - 03:00pm: Scalable 3D Modeling Using Multi-player Interactive Genetic Algorithm on Cloud Platform as a Service
Takahito Seyama, Shintaro Bando, Masaharu Munetomo
Hokkaido University, Sapporo, Japan
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-PDPTA
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**
- 0. Parallel Fuzzy Filter for Impulse Noise Removal
Josep Arnal, Maria Sanchez, Luis Sucar, Vicente Vidal
Universidad de Alicante, Spain; Instituto Tecnológico Cd. Guzman, Mexico; Universidad Politecnica de Valencia, Spain
 - 0. A Novel Method to Minimize Side Effects by Cache Contention on the Inclusive Multi-Core Shared Cache
Hyo-Joong Suh
The Catholic University of Korea, South Korea
 - 0. ...
- SESSION 1-PDPTA: Continued: WORKSHOP: MATHEMATICAL MODELING AND PROBLEM SOLVING, MPS
(LOCATION: Ballroom 5)**
- 03:40 - 04:00pm: Selecting Strategies in Particle Swarm Optimization by Sampling-Based Landscape Modality Detection
Tetsuyuki Takahama, Setsuko Sakai
Graduate School of Information Sciences, Hiroshima, Japan
- 04:00 - 04:20pm: A Study on Non-Correspondence in Spread Between Objective Space and Design Variable Space in Pareto Solutions
Tomohiro Yoshikawa, Toru Yoshida
Nagoya University, Nagoya, Japan
- 04:20 - 04:40pm: Task Scheduling Algorithm for Multicore Processor Systems with Turbo Boost and Hyper-Threading
Yosuke Wakisaka, Naoki Shibata, Keichi Yasumoto, Minoru Ito, and Junji Kitamichi
Nara Institute of Science and Technology, Ikoma, Nara, Japan
- 04:40 - 05:00pm: Multiple Precision Integer Multiplication on GPUs
Koji Kitano, Noriyuki Fujimoto
Osaka Prefecture University, Sakai, Osaka, Japan

- 05:00 - 05:20pm: Combining the Phoenix Flash Code with the Binary Index Flash Code for Low Write Deficiency
Geonina Noriel Corneby, Lea Karla Sanchez, Proceso Fernandez, Michael Joseph Tan, Yuichi Kanji
Nara Institute of Science and Technology, Ikoma, Nara, Japan
- 05:20 - 05:40pm: A CIL Virtual Machine for Wireless Sensor Network Applications
Yutaka Yanagisawa, Futoshi Naya, Yasue Kishino
Hikaridai, Seika-cho, Soraku-gun, Kyoto, Japan
- 05:40 - 06:00pm: Quantifying Sentiment for the Japanese Economy and Stock Price Prediction
Hiroshi Ishijima, Takuro Kazumi, Akira Maeda
Chuo University, Shinjuku-ku, Tokyo, Japan
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)**
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)**

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 2-PDPTA: ENERGY EFFICIENT NETWORKING SYSTEMS APPLICABLE TO EMERGENCY**
Chair: Prof. Hiroaki Nishikawa, University of Tsukuba, Japan
Co-Chair: Prof. Hiroshi Ishii, Tokai University, Tokyo, Japan
July 22, 2014 (Tuesday); 08:00am - 11:40am
(LOCATION: Ballroom 5)
- 08:00 - 08:20am: FREE SLOT
- 08:20 - 08:40am: XXX A Novel Information Sharing Architecture Constructed by Broadcast Based Information Sharing System (BBISS)
 Keisuke Utsu, Chee Onn Chow, Hiroaki Nishikawa, Hiroshi Ishii
 Tokai University, Tokyo, Japan
- 08:40 - 09:00am: XXX An Optimization Study on Broadcast Based Information Sharing System (BBISS)
 Sayuri Wada, Hiroshi Ishii, Hiroaki Nishikawa, Keisuke Utsu
 Tokai University, Tokyo, Japan
- 09:00 - 09:20am: XXX A Safety Information Sharing Application on BBISS
 Tomomi Itoh, Ayami Manaka, Yuuka Sugawara, Hiroshi Ishii,
 Hiroaki Nishikawa, Keisuke Utsu
 Tokai University, Tokyo, Japan
- 09:20 - 09:40am: XXX Location Data Supplementing Information Transfer Method over MANET
 Kei Kobayashi, Yosuke Totani, Hiroshi Sano, Keisuke Utsu, and
 Hiroshi Ishii
 Tokai University, Tokyo, Japan
- 09:40 - 10:00am: XXX A Proposal on Location-aided Route Discovery Based on Two-hop Neighbor Information Over Ad Hoc Network and its Preliminary Evaluation
 Phonepadith Phounmmavong, Keisuke Utsu, Hiroshi Ishii
 Tokai University, Tokyo, Japan
- 10:00 - 10:20am: XXX A Proposal on Efficient Broadcast Based Information Transfer Method Using Location Data over MANET
 Yosuke Totani, Keisuke Utsu, Hiroshi Ishii
 Tokai University, Tokyo, Japan
- 10:20 - 10:40am: BREAK**
- 10:40 - 11:00am: XXX Energy Efficient Data-Driven Networking Processor with Autonomous Load Distribution Capability
 Shuji Sannomiya, Hiroaki Nishikawa
 University of Tsukuba, Tsukuba Science City, Ibaraki, Japan
- 11:00 - 11:20am: XXX Spatial Parallelization of Self-Timed FFT Circuit
 Norifumi Uno, Ryuichi Taguchi, Makoto Iwata
 Kochi University of Technology, Kochi, Japan
- 11:20 - 11:40am: XXX DL Timing-Error Detection and Recovery Circuit for Self-Timed Pipeline
 Syohei Okamune, Kei Miyagi, Makoto Iwata
 Kochi University of Technology, Kochi, Japan

SESSION 3-PDPTA: PARALLEL COMPUTING AND ALGORITHMS + MULTI-CORE AND ENERGY-AWARE COMPUTING + EMBEDDED SYSTEMS + NOC
XXX Chair: Dr. Abu Asaduzzaman, Wichita State University, Kansas, USA
July 22, 2014 (Tuesday); 11:40am - 02:00pm
(LOCATION: Ballroom 5)

11:40 - 12:00pm: Modeling the Effects on Power and Performance from Memory Interference of Co-located Applications in Multicore Systems
 Daniel Dauwe, Ryan Friese, Sudeep Pasricha, Anthony A. Maciejewski, Gregory A. Koenig, Howard Jay Siegel
 Colorado State University, Fort Collins, Colorado, USA;
 Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA;
 The National Science Foundation, USA

12:00 - 12:20pm: Processing NOAA Observation Data Over Hybrid Computer Systems for Comparative Climate Change Analysis
 Xuan Shi, Dali Wang
 University of Arkansas, Fayetteville, Arkansas, USA;
 Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA

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

01:20 - 01:40pm: High Efficiency Video Decoding on Multicore Processor
 Hyeonggeon Lee, Jong Kang Park, Jong Tae Kim
 Sungkyunkwan University, South Korea

01:40 - 02:00pm: Design of an In-Memory Database Engine Using Intel Xeon Phi Coprocessors
 Michael Scherger
 Texas Christian University, Forth Worth, Texas, USA

SESSION 4-PDPTA: PARALLEL PROGRAMMING + NOVEL FRAMEWORKS + ARCHITECTURES + SYSTEMS
Chair: TBA
July 22, 2014 (Tuesday); 02:00pm - 03:00pm
(LOCATION: Ballroom 5)

02:00 - 02:20pm: Wait-less Parallel (MPI) Programming: A Disciplined Approach
 Ralph Butler, Chrisila Pettey, Nathan Reale
 Middle Tennessee State University, Murfreesboro, Tennessee, USA

02:20 - 02:40pm: Hybrid CPU-GPU Pipeline Framework
 Fahad Khalid, Frank Feinbube, Andreas Polze
 Hasso Plattner Institute for Software Systems Engineering, Germany

02:40 - 03:00pm: Implementing MPI Barrier with the NetFPGA
 Omer Arap, Geoffrey Brown, Bryce Himebaugh, Martin Swany
 Indiana University, Bloomington, Indiana, USA

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-PDPTA
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)

0. Study of Thermal-noise-assisted Signal Propagation of Neuromorphic Single-electron Circuit
 Ryo Hirashima, Tetsuya Asai, Takahide Oya
 Yokohama National University, Japan; Hokkaido University, Japan
0. Hierarchical Parallelization of HEVC Encoder for UHD Video
 Bumho Kim
 Electronics and Telecommunications Research Institute (ETRI),
 South Korea

- 0. XXX Computation of Control Related States of Top Left K-net System of Petri Nets
Daniel Yuh Chao, Tsung Hsien Yu, Ding Chun Huang
National Cheng Chi University, Taipei, Taiwan, R.O.C.
- 0. XXX Low-power Task Scheduling in Homogeneous Quad-core Processor
Gyuhun Kim, Myungha Kim, Hyeonggeon Lee, Jong Kang Park, Jong Tae Kim
Sungkyunkwan University, South Korea
- 0. XXX High Performance Embedded Software Design for Protective Relay Algorithm in Digital Signal Processors
Heung Sun Yoon, Myungha Kim, Jong Kang Park, Jong Tae Kim
Sungkyunkwan University, South Korea
- 0. ...

**03:40 - 04:20pm: INVITED LECTURE:
A PRIMITIVE ARTIFICIAL PREFRONTAL CORTEX FOR COGNITIVE SELF-REGULATION IN ARTIFICIAL LIFE FORMS
Dr. James A. Crowder
Chief Engineer, Raytheon Intelligence, Information, and Services
Aurora, Colorado, USA; Chief Mentor/Scientist of the Automation, Robotics and Artificial Intelligence Research Lab., Alexandria School of Innovation, Douglas County, Colorado, USA
(LOCATION: Ballroom 4)**

**04:20 - 06:00pm: PANEL DISCUSSION:
THOUGHTS, LANGUAGE, AND MEMORIES FOR HUMANS vs. ARTIFICIALLY INTELLIGENT ENTITIES
PANEL CHAIR: Dr. James A. Crowder; Chief Engineer, Raytheon Intelligence, Information and Services, USA
PANELISTS:
Prof. Victor Raskin; Distinguished Professor, English & Linguistics Professor, Computer Science (courtesy); Professor, Computer and Information Technology (courtesy); Associate Director & Charter Fellow, CERIAS; Purdue University, USA;
Dr. Julia M. Taylor; Computer & Information Technology; Fellow, CERIAS; Purdue University, USA;
Shelli Friess; Cognitive Psychologist, Relevant Counseling, USA;
Dr. John Carbone; Engineering Fellow, Raytheon Intelligence, Information and Services, Aurora, Colorado, USA
(LOCATION: Ballroom 4)**

**06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

**SESSION 5-PDPTA: BIG DATA AND DATA ANALYTICS + RELATED TECHNOLOGIES AND METHODS
XXX + SOCIAL NETWORKS + DATA PARALLELISM + DATABASES
Chair: TBA
XXX July 23, 2014 (Wednesday); 08:00am - 10:40am
(LOCATION: Ballroom 5)**

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: XXX Impact of Thread Synchronization and Data Parallelism on
Multicore Game Programming
Abu Asaduzzaman, Hin Y. Lee, Deepthi Gummadi
Wichita State University, Wichita, Kansas, USA

08:40 - 09:00am: An Adaptive Data Resourcing Model to Relieve the Pain of Searching
from Hybrid Clouds for Big Data
Yilang Wu, Junbo Wang, Zixue Cheng
University of Aizu, Aizu-wakamatsu, Japan

09:00 - 09:20am: Resocialization and Uses of Social Networks for Elderly
Cecile Treton, Christian Bourret
Paris Est University, Paris France;
DICEN IDF, CNAM UPEM, Paris Ouest University Marne la Vallee, France

09:20 - 09:40am: Hadoop MapReduce Configuration Parameters and System Performance:
a Systematic Review
Ailton S. Bonifacio, Andre Menolli, Fabiano Silva
Federal University of Parana and State University of Londrina, Brazil;
Universidade Estadual do Norte do Parana, Brazil

09:40 - 10:00am: PDTSS: A Scalable Parallel Decision Tree Algorithm Based on MapReduce
Yan Cui, Yuanyang Yang, Shizhong Liao
Tianjin University, P. R. China

10:00 - 10:20am: Task Allocation and Node Activation for Energy-Proportional
MapReduce Clusters
Min-Ki Kim, Haengrae Cho
Yeungnam University, Gyungbuk, Gyungbuk, Republic of Korea

10:20 - 10:40am: XXX Fault-Tolerant Databases: Assessing the Risks and Costs
Berkay Surmeli, Martin Maskarinec, Kathleen Neumann
Western Illinois University, Macomb, Illinois, USA

**SESSION 6-PDPTA: HIGH-PERFORMANCE COMPUTING + DISTRIBUTED ALGORITHMS & APPLICATIONS
Chair: TBA
July 23, 2014 (Wednesday); 10:40am - 12:20pm
(LOCATION: Ballroom 5)**

10:40 - 11:00am: Real-time Token-based Mutual Exclusion Algorithms
Mitchell L. Neilsen
Kansas State University, Manhattan, Kansas, USA

11:00 - 11:20am: Cost-aware Short-term Load Forecasting of Power System
Kai-Chao Yang, Chung-Chieh Huang, Jia-Shung Wang
National Tsing-Hua University, Taiwan, R.O.C.

11:20 - 11:40am: Design of an FPGA-Based FDTD Accelerator Using OpenCL
Yasuhiro Takei, Hasitha Muthumala Waidyasooriya, Masanori Hariyama,
and Michitaka Kameyama
Graduate School of Information Sciences, Tohoku University, Japan

- 11:40 - 12:00pm: A Practical Election Protocol Based on an Unreliable Failure Detector in Distributed Systems
Sung-Hoon Park, Yong-Hwan Cho, Seon-Hyong Lee
Chungbuk National University, Cheongju, ChungBuk, South Korea
- 12:00 - 12:20pm: Autonomic Management for Availability and Performance in SaaS Model
Nadir K. Salih
School of Computer Science and Engineering, Harbin Institute of Technology, P. R. China
- 12:20 - 01:20pm: **LUNCH (On Your Own)**
- SESSION 7-PDPTA: PARALLEL COMPUTING & ALGORITHMS + MULTI-CORE & ENERGY-AWARE COMPUTING + EMBEDDED SYSTEMS + NOC**
XXX Co-Chairs: Prof. Jong-Myon Kim; University of Ulsan, South Korea;
Prof. Dilip Sarkar; University of Miami, Florida, USA
July 23, 2014 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Ballroom 5)
- 01:20 - 01:40pm: Accelerating Medical Image Registration Using a SIMD Array
Inkyu Jeong, Myeongsu Kang, Cheol-Hong Kim, Jong-Myon Kim
University of Ulsan, South Korea;
Chonnam National University, South Korea
- 01:40 - 02:00pm: Scalable Self-Tuning Implementation of Smith-Waterman Algorithm for Multicore CPUs
Faisal Sikder, Dilip Sarkar
University of Miami, Florida, USA
- 02:00 - 02:20pm: Viability of the Parallel Prefix Algorithm for Sequence Alignment on Massively Parallel GPUs
Christian Dicker, Samuel Kelly, John Sibandze, Jens Mache
Lewis & Clark College, USA
- 02:20 - 02:40pm: Discrete Event Hard-Sphere Collisions Using OpenCL
Zachary Langbert, Mark C. Lewis
Trinity University, San Antonio, Texas, USA
- 02:40 - 03:00pm: Energy Efficient Computation with Large Data Sets
Carsten Maple
University of Bedfordshire, UK
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-PDPTA**
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)
- SESSION 8-PDPTA: SYSTEMS SOFTWARE + PARALLEL PROGRAMMING MODELS + PETRI NETS + CACHE COHERENCE + MULTI-CORE AND APPLICATIONS**
XXX Chair: Derek Kern, University of Colorado Denver, Colorado, USA
July 23, 2014 (Wednesday); 03:40pm - 06:00pm
(LOCATION: Ballroom 5)
- 03:40 - 04:00pm: Automatic Performance Tuning of Pipeline Patterns for Heterogeneous Parallel Architectures
Enes Bajrovic, Siegfried Benkner
Faculty of Computer Science, University of Vienna, Austria
- 04:00 - 04:20pm: Exploiting Reuse-Frequency with Speculative and Dynamic Updates in an Enhanced Directory Based Coherence Protocol
Nilufar Ferdous, Byeong Kil Lee, Eugene John
University of Texas at San Antonio, San Antonio, Texas, USA;
Samsung Research, Seoul, South Korea

- 04:20 - 04:40pm: Miss-rate Based Dynamic Phase Tracking on Multicore Processors
Sourav Dutta, Nazeih Botros
Southern Illinois University Carbondale, Illinois, USA
- 04:40 - 05:00pm: Petri Net Based Algorithm Modelization and Parallel Execution on Symmetric Multiprocessors
Gustavo Wolfmann, Armando De Giusti
Facultad de Ciencias Exactas Fisicas y Naturales, Universidad Nacional de Cordoba, Cordoba, Argentina; Facultad de Informatica, Universidad Nacional de La Plata, La Plata, Argentina
- 05:00 - 05:20pm: Maximizing Hardware Performance via Non-blocking Collective Communication for All Pairs Shortest Paths Computation on Heterogeneous Multi-core Processors
Eduardo A. Colmenares, Yu Zhuang
Texas Tech University, Lubbock, Texas, USA
- 05:20 - 05:40pm: How to Find the Best Rules for CA-based PRNG
Miroslaw Szaban
Institute of Computer Science, Siedlce University, Poland
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 9-PDPTA: PARALLEL COMPUTING AND ALGORITHMS + MULTI-CORE & ENERGY-AWARE COMPUTING + EMBEDDED SYSTEMS + NOC
XXX Chair: Derek Kern, University of Colorado Denver, Colorado, USA
July 24, 2014 (Thursday); 08:00am - 10:20am
(LOCATION: Ballroom 5)

08:00 - 08:20am: FREE SLOT

08:20 - 08:40am: FREE SLOT

08:40 - 09:00am: XXX FREE SLOT

09:00 - 09:20am: An SIMD Architecture for Shortest-Path Search and Its FPGA Implementation
 Yasuhiro Takei, Masanori Hariyama, Michitaka Kameyama
 Graduate School of Information Sciences, Tohoku University, Japan

09:20 - 09:40am: XXX FREE SLOT

09:40 - 10:00am: System Level Comparative Performance Analysis of H.264 Encoder by Network-on-Chip Topologies
 Suk Ki Lee, Jong Kang Park, Jong Tae Kim
 Sungkyunkwan University, South Korea

10:00 - 10:20am: Parallel Insertion Merge
 Fernando Belmiro Do Couto, Fabio Silva Do Couto
 BBDTVM, Brazil;
 UFRJ - Universidade Federal do Rio de Janeiro, Brazil

10:20 - 10:40am: BREAK

SESSION 10-PDPTA: (CONCURRENT SESSION WITH SESSION 12-PDPTA)
SCIENTIFIC COMPUTING, FFT, MATRIX PROBLEMS, LINEAR SYSTEMS, FINITE ELEMENT METHODS
XXX Chair: William Dai; Project Leader, Los Alamos National Laboratory, Los Alamos, New Mexico, USA
July 24, 2014 (Thursday); 10:40am - 12:20pm
(LOCATION: Ballroom 5)

10:40 - 11:00am: Parallel Processing of Irregular Workloads on the GPGPU: Adaptive Quadrature
 Derek Kern, Gita Alaghband
 University of Colorado Denver, Denver, Colorado, USA

11:00 - 11:20am: Embarrassingly Parallel Butterflies Solve Diagonally Dominant Tridiagonal Toeplitz Systems
 Brian J. Murphy
 Lehman College, The City University of New York, Bronx, New York, USA

11:20 - 11:40am: Resiliency in IO Tools for Scientific Computing
 William W. Dai
 Los Alamos National Laboratory, Los Alamos, New Mexico, USA

11:40 - 12:00pm: Parallelizing Matrix Exponential Based Solver on Shared Memory Systems Using Cilk
 Abdul Jabbar Saeed Tipu, Ammar Hasan, Mohsan Jameel, Aamir Shafi
 National University of Sciences and Technology, Islamabad, Pakistan

- 12:00 - 12:20pm: Analyzing The Effect of Contextual Information in Noise Based Classifier on Satellite Images
Rakesh Dwivedia, S. K. Ghosha, Anil Kumarb
Indian Institute of Technology, Roorkee, India;
Indian Institute of Remote Sensing, Dehradun, India
- 12:20 - 01:00pm: **LUNCH (On Your Own)**
- SESSION 11-PDPTA: (CONCURRENT SESSION WITH SESSIONS 12-PDPTA AND 13-PDPTA)
COMPLEX SYSTEMS, THEORY AND APPLICATIONS + PARALLEL PROGRAMMING
AND NOVEL FRAMEWORKS + PARALLEL ARCHITECTURES AND SYSTEMS
Chair: TBA
July 24, 2014 (Thursday); 01:00pm - 06:00pm
(LOCATION: Ballroom 5)**
- 01:00 - 01:20pm: Traffic Regime and 1/f Noise for a Specific Approach to a City
R. Thieberger
Department of Physics, Ben Gurion University, Beer Sheva, Israel
- 01:20 - 01:40pm: Synthetic Earthquakes Obtained with Two Cellular Automata Models and Comparison with Real Seismicity
Alejandro Munoz Diosdado
Unidad Profesional Interdisciplinaria de Biotecnología,
National Polytechnic Institute. Mexico
- 01:40 - 02:00pm: Parallelization of an Iterative Method for Solving Large and Sparse Linear Systems Using the CUDA-Matlab Integration
Lauro Cassio Martins De Paula, Anderson Da Silva Soares
Federal University of Goias, Brazil
- 02:00 - 02:20pm: Cellular Automata as Acceleration Kernel of Interconnection Network Simulation
Takashi Yokota, Kanemitsu Ootsu, Takeshi Ohkawa
Utsunomiya University, Japan
- 02:20 - 02:40pm: A Memory-Efficient Algorithm for Large-Scale Symmetric Tridiagonal Eigenvalue Problem on Multi-GPU Systems
Hyunsu Cho, Peter A. Yoon
Trinity College, Hartford, CT, USA
- 02:40 - 03:00pm: XXX FREE SLOT
- 03:00 - 03:20pm: BREAK**
- 03:20 - 03:40pm: Efficient Anonymization of the SocioNet with the Aid of Rumor Riding
Hiroki Iizuka, Satoshi Fujita
Hiroshima University, Japan
- 03:40 - 04:00pm: Parallelization of an Analytical Method for the Evaluation of Voltage Sags in Electric Power Systems
Armando Antunez-Garcia, Antonio Ramos-Paz, Elisa Espinosa-Juarez, and Carlos Ceja-Espinosa
Faculty of Electrical Engineering, Universidad Michoacana de San Nicolas de Hidalgo, Morelia, Mexico
- 04:00 - 04:20pm: The Solution of a FEM Equation in Frequency Domain Using a Parallel Computing with CUBLAS
Raul Dominguez, Aurelio Medina, Antonio Ramos-Paz
Facultad de Ingenieria Electrica, Division de Estudios de Posgrado, U.M.S.N.H., Ciudad Universitaria, Michoacan, Mexico

- 04:20 - 04:40pm: Multi-Gbps Fano Decoding Algorithm on GPGPU
Ozgun Ates, Selcuk Keskin, Taskin Kocak
Bahcesehir University, Istanbul 34353, Turkey
- 04:40 - 05:00pm: Study of Single-electron DOMINO Logic Circuit
Hiroyuki Otake, Tetsuya Asai, Takahide Oya
Yokohama National University, Japan;
Hokkaido University, Japan
- 05:00 - 05:20pm: XXX FREE SLOT
- 05:20 - 05:40pm: Radiation Therapy Optimization with GPU Programming
David Allen, Ovidiu Daescu
The University of Texas at Dallas, Richardson, Texas, USA
- 05:40 - 06:00pm: FREE SLOT
- SESSION 12-PDPTA: (CONCURRENT SESSION WITH SESSIONS 10-PDPTA AND 11-PDPTA)
COMMUNICATION SYSTEMS & INPUT OUTPUT SYSTEMS + INTERCONNECTION
NETWORKS & TOPOLOGIES + ROUTING METHODS + NEW PROTOCOLS + VANET +
PEER-TO-PEER NETWORKS + SENSOR NETWORKS AND APPLICATIONS
Chair: TBA
July 24, 2014 (Thursday); 10:40am - 02:20pm
(LOCATION: Ballroom 2)**
- 10:40 - 11:00am: A Fault-tolerant Routing Algorithm Based on Safety Levels in a
Hyper-Star Graph
Yuko Sasaki, Yuki Hirai, Hironori Nakajo, Keiichi Kaneko
Tokyo University of Agriculture and Technology, Japan
- 11:00 - 11:20am: Incentive Scheme for P2P Live Streaming Systems Being Aware of the
Upload Capability of the Participants
Shogo Kanda, Satoshi Fujita
Hiroshima University, Japan
- 11:20 - 11:40am: Linux Software RAID Level 0 Technique for High Performance
Computing by Using PCI-Express Based SSD
Jae Gi Son, Taegyeong Kim, Kuk Jin Jang, Hyedong Jung
Korea Electronics Technology Institute, South Korea
- 11:40 - 12:00pm: The Static and Dynamic Performance of An Adaptive Routing Algorithm
of 2-D Torus Network Based on Turn Model
Yasuyuki Miura, Kentaro Shimozone, Shigeyoshi Watanabe, Kazuya Matoyama
Shonan Institute of Technology, Japan;
Net-Research Co., Ltd., Japan
- 12:00 - 12:20pm: XXX FREE SLOT
- 12:20 - 01:00pm: LUNCH (On Your Own)**
- 01:00 - 01:20pm: GPU-based String Matching Method Using Warp Shuffle Instructions
for Service-oriented Routers
Satoshi Koibuchi, Kazumasa Ikeuchi, Shinichi Ishida, Hiroaki Nishi
Graduate School of Science and Technology, Keio University, Japan
- 01:20 - 01:40pm: Study of Dynamically-Allocated Multi-Queue Buffers for NoC Routers
Yungchou Tsai, Yarsun Hsu
National Tsing Hua University, Hsinchu, Taiwan, R.O.C.

- 01:40 - 02:00pm: How to Tolerate Simultaneous Leave of Peers in Tree-Structured P2P Live Streaming Systems
Tatsuya Kouchi, Satoshi Fujita
Hiroshima University, Japan
- 02:00 - 02:20pm: Three Dimensional Free Space Optical Network Reconfiguration Heuristics Using Active Link Removal
Xuemei Sun, Danny Luong, G. Young
California State Polytechnic University, Pomona, California, USA

**SESSION 13-PDPTA: (CONCURRENT SESSION WITH SESSION 11-PDPTA)
PARALLEL AND DISTRIBUTED COMPUTING - LATE BREAKING PAPERS &
POSITION PAPERS
Chair: TBA
July 24, 2014 (Thursday); 02:20pm - 04:40pm
(LOCATION: Ballroom 2)**

NOTE: We anticipate a large number of speaker no-shows for this track; this is due to potential delay in obtaining US visa, non registration, ... In cases of no-shows, the presentations can be moved up in order to close time gaps in the session.

- 02:20 - 02:40pm: XXX FREE SLOT
- 02:40 - 03:00pm: Compiler-Level Explicit Cache for a GPGPU Programming Framework
Tomoharu Kamiya, Takanori Maruyama, Kazuhiko Ohno
Mie University, Kurimamachiya-cho, Tsu City, Mie, Japan
- 03:00 - 03:20pm: BREAK**
- 03:20 - 03:40pm: XXX FREE SLOT
- 03:40 - 04:00pm: Efficient Classification of Hyperspectral Images on Commodity GPUs Using ELM-based Techniques
Javier Lopez-Fandino, Dora B. Heras, Francisco Arguello
Centro Singular de Investigacion en Tecnoloxias da Informacion (CITIIUS), Universidade de Santiago de Compostela Rua de Jenaro de la Fuente, Dominguez, Spain
- 04:00 - 04:20pm: Heuristics for Conversion Process of GPU's Kernels for Multiples Kernels with Concurrent Optimization Divergence
Jose Ritomar Carneiro Torquato, Esteban Walter Gonzalez Clua
Federal Fluminense University, Niteroi-RJ, Brazil
- 04:20 - 04:40pm: On the Optimization of HDA for Multicore Machines; Performance Analysis
Victoria Sanz, Armando De Giusti, Marcelo Naiouf
III- LIDI, UNLP, La Plata, Buenos Aires, Argentina

SAM'14 CONFERENCE SCHEDULE

The 2014 International Conference on Security and Management

There are a number of other sessions (not listed as part of SAM'14 in this schedule) that are of potential interest to SAM'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, some sessions in ICWN'14, GCA'14, ABDA'14, ICOMP'14, and FECS'14 conferences discuss topics that are within the scope of SAM'14; these have been scheduled so that selected SAM'14 groups/attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:
 Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
 University of Georgia, Georgia, USA;
 Editor-in-Chief, The Journal of Supercomputing (Springer)
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:
 SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
 PHYSICAL CYBER SOCIAL BIG DATA
 Prof. Amit Sheth
 Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
 Director, Ohio Center of Excellence in Knowledge-enabled Computing
 (Kno.e.sis) and Professor of Computer Science, Wright State
 University, Ohio, USA
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:
 VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
 Prof. Alfred Inselberg
 School of Mathematical Sciences, Tel Aviv University, Israel;
 Senior Fellow, San Diego Supercomputing Center; Inventor of the
 multidimensional system of Parallel Coordinates and author of
 textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
 (praised by Stephen Hawking among others.)
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:
 BIG DATA ANALYTICS COGNITIVE ALGORITHMS
 Dr. Leonid I. Perlovsky
 Harvard University, Cambridge, Massachusetts, USA (School of
 Engineering and Applied Sciences and Medical School Athinoula
 Martinos Brain Imaging Center); The US Air Force Research Lab.,
 USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
 on The Mind and Brain; Recipient of John McLucas Award (the
 highest US Air Force Award for basic research)
 (LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)
- SESSION 1-SAM: SECURITY EDUCATION
 Co-Chairs: Dr. Gregory Vert, Texas A&M University, USA;
 Dr. Syed Rizvi, Pennsylvania State University, Altoona, USA
 July 21, 2014 (Monday); 01:00pm - 02:20pm
 (LOCATION: Ballroom 2)
- 01:00 - 01:20pm: Cybersecurity Awareness in Organizations: A Case Study of University
 of Venda
 Isong Bassej and Murendeni Randiman
 University of Venda Thohoyandou, South Africa
- 01:20 - 01:40pm: The UWF Cyber Battle Lab: A Hands-On Computer Lab for Teaching and
 Research in Cyber
 C. Terry, A. Castellano, J. Harrod, J. Luke, T. Reichherzer
 University of West Florida, Pensacola, Florida, USA
- 01:40 - 02:00pm: Bite-sized Learning of Privacy Issues
 Svetlana Peltsverger
 Southern Polytechnic State University, Georgia, USA

- 02:00 - 02:20pm: A Survey on Student Privacy Attitudes and Behaviors
Mark Rowan and Josh Dehlinger
Towson University, Towson, Maryland, USA
- SESSION 2-SAM: SPECIAL TRACK ON WIRELESS NETWORKS SECURITY + MODELING OF INFORMATION SECURITY**
Co-Chairs: Dr. Hanen Idoudi, Manouba University, Tunisia;
Dr. Samiha Ayed, Telecom Bretagne, France
July 21, 2014 (Monday); 02:20pm - 04:20pm
(LOCATION: Ballroom 2)
- 02:20 - 02:40pm: Security Considerations in WSN-Based Smart Grids
Hanen Idoudi and Mustafa Saed
University of Manouba, Tunisia;
University of Detroit Mercy, Detroit, Michigan, USA
- 02:40 - 03:00pm: Security of Online Social Networks
Rihab Ben Aicha, Hanen Idoudi
National School of Computer Sciences, University of Manouba,
Tunisia
- 03:00 - 03:20pm: BREAK**
- 03:20 - 03:40pm: Security Concepts and Issues in Intra-Inter Vehicle Communication Network
Mustafa Saed, Scott Bone, John Robb
University of Detroit Mercy, Detroit, Michigan, USA;
Hyundai-Kia America Technical Center, Inc., USA
- 03:40 - 04:00pm: Negotiation of Sensitive Resources Using Different Strategies for Policy's Protection
Diala Abi Haidar
Dar Al Hekma University, Jeddah, Saudi Arabia
- 04:00 - 04:20pm: MPEG-21 Based Approach to Secure Digital Contents Using DC Metadata
Samiha Ayed, Muhammad Sabir Idrees, Nora Cuppens-Boulaïhia,
and Frederic Cuppens
Telecom Bretagne, Cesson Sevigne, France
- SESSION 3-SAM: INFORMATION ASSURANCE**
Chair: Dr. Hiroaki Kikuchi, Meiji University, Japan
July 21, 2014 (Monday); 04:20pm - 05:40pm
(LOCATION: Ballroom 2)
- 04:20 - 04:40pm: Simple Method to Quantify Audit Findings
Gary Lieberman
Division of Business, Caldwell College, Caldwell, New Jersey, USA
- 04:40 - 05:00pm: Small to Medium Enterprise Cyber Security Awareness: An Initial Survey of Western Australian Business
Craig Valli, Ian Martinus, Mike Johnstone
Security Research Institute, Edith Cowan University, Australia
- 05:00 - 05:20pm: Detecting the Vulnerability of Multi-Party Authorization Protocols to Name Matching Attacks
Wenjie Lin, Guoxing Chen, Ten H. Lai, David Lee
Ohio State University, Columbus, Ohio, USA;
HP Labs, Palo Alto, California, USA
- 05:20 - 05:40pm: A Dynamic Approach to Risk Calculation for the RAdAC Model
Roberto Marinho, Carla Merkle Westphall, Gustavo Roecker Schmitt
Informatics and Statistics Department, Federal University of Santa Catarina, Florianopolis, Brazil

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)

09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 4-SAM: NETWORK SECURITY + SECURITY MANAGEMENT
Co-Chairs: Prof. Bon Sy, City University of New York, USA;
Dr. Gary Lieberman, Caldwell College, USA
July 22, 2014 (Tuesday); 08:00am - 10:20pm
(LOCATION: Ballroom 2)

- 08:00 - 08:20am: Malicious Device Inspection in the HAN Smart Grid
Eric McCary, Yang Xiao
University of Alabama, Tuscaloosa, Alabama, USA
- 08:20 - 08:40am: Developing and Assessing a Multi-Factor Authentication Protocol for Revocable Distributed Storage in a Mobile Wireless Network
Scott Bell, Eugene Vasserman, Daniel Andresen
Kansas State University, Manhattan, Kansas, USA
- 08:40 - 09:00am: Smart Grid HAN Accountability with Varying Consumption Devices
Eric McCary, Yang Xiao
University of Alabama, Tuscaloosa, Alabama, USA
- 09:00 - 09:20am: Implementation of Oblivious Bloom Intersection in Private Set Intersection Protocol (PSI)
Levent Ertaul, Aditya M. Mehta, Takai K. Wu
California State University East Bay, Hayward, California, USA
- 09:20 - 09:40am: A Comparative Evaluation of Intrusion-Alert Prediction Techniques
Kian-Moh Terence Tan, Neil C. Rowe, Christian J. Darken, and Farn-Wei J. Khong
DSO National Laboratories, Singapore;
U.S. Naval Postgraduate School, Monterey, California, USA;
Defence Science & Technology Agency, Singapore
- 09:40 - 10:00am: Email Encryption: Discovering Reasons Behind its Lack of Acceptance
Kendal Stephens, Lei Chen
Sam Houston State University, Huntsville, Texas, USA
- 10:00 - 10:20am: IT Security Policies and Employee Compliance: The Effects of Organizational Environment
Kendal Stephens, Narasimha Shashidhar
Sam Houston State University, Huntsville, Texas, USA

10:20 - 10:40am: BREAK

SESSION 5-SAM: BIOMETRICS & FORENSICS I + CRYPTOGRAPHIC TECHNOLOGIES
Co-chairs: Dr. Audrey Gendreau, Saint Leo University, USA;
Dr. Victor Gayoso Mart.nez, CSIC, Spain
July 22, 2014 (Tuesday); 10:40am - 12:00pm
(LOCATION: Ballroom 2)

- 10:40 - 11:00am: State of the Art in Similarity Preserving Hashing Functions
V. Gayoso Martinez, F. Hernandez Alvarez, L. Hernandez Encinas
CSIC, Spain; Institute of Physical and Information Technologies (ITEFI), Spain
- 11:00 - 11:20am: VOIP Forgery Detection
Satish Tummala, Yanxin Liu, Qingzhong Liu
Sam Houston State University, Huntsville, Texas, USA
- 11:20 - 11:40am: A Low-Complexity Procedure for Pupil and Iris Detection Suitable for Biometric Identification
V. Gayoso Martinez, F. Hernandez Alvarez, L. Hernandez Encinas
CSIC, Spain; Institute of Physical and Information Technologies (ITEFI), Spain

11:40 - 12:00pm: Towards Designing a Greener Advanced Encryption Standard (AES)
S. Raghu Talluri, Swapnoneel Roy
University of North Florida, Jacksonville, Florida, USA

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

SESSION 6-SAM: COMPUTER AND HARDWARE SECURITY
Co-Chairs: Dr. Nicolas Sklavos, Technological Educational Institute of Western Greece, Greece;
Dr. Samuel Ndueso John, Covenant University, Nigeria
July 22, 2014 (Tuesday); 01:00am - 02:20pm
(LOCATION: Ballroom 2)

01:00 - 01:20pm: Modeling and Attack for 4-MUXs Based PUF
Shohei Kiryu, Kensaku Asahi, Masaya Yoshikawa
Department of Information Engineering, Meijo University, Japan

01:20 - 01:40pm: Relationship Between Number of Stages in ROPUF and CRP generation on FPGA
Muslim Mustapa, Mohammed Niamat
Electrical Engineering and Computer Science, University of Toledo, USA

01:40 - 02:00pm: Autonomic Intrusion Detection System in Cloud Computing with Big Data
Kleber M. M. Vieira, Fernando Schubert, Guilherme A. Geronimo, Rafael de Souza Mendes, Carlos B. Westphall
The Federal University of Santa Catarina (UFSC), Santa Catarina, Brazil

02:00 - 02:20pm: Fourier Transform as Feature Extraction for Malware Classification
Stanislav Ponomarev, Nathan Wallace, Travis Atkison
Louisiana Tech University, Ruston, Louisiana, USA

SESSION 7-SAM: SPECIAL TRACK ON IOT AND SCADA CYBERSECURITY EDUCATION
Chair: Prof. George Markowsky; Professor & Associate Director, School of Computing & Information Science, University of Maine, Orono, Maine, USA
July 22, 2014 (Tuesday); 02:20pm - 06:00pm
(LOCATION: Ballroom 2)

02:20 - 02:40pm: MODBUS Covert Channel
Carlos Leonardo, Daryl Johnson
Networking, Security & Systems Administration, Rochester Institute of Technology, Rochester, New York, USA

02:40 - 03:00pm: A Behavior-Based Covert Channel in a MMQ
Brian Rowe, Daryl Johnson
Networking, Security & Systems Administration, Rochester Institute of Technology, Rochester, New York, USA

03:00 - 03:40pm: **BREAK & POSTER/DISCUSSION SESSION A-SAM**
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)

SESSION 7-SAM: Continued ... SPECIAL TRACK ON IOT AND SCADA CYBERSECURITY EDUCATION

03:40 - 04:00pm: CloudWhip: A Tool for Provisioning Cyber Security Labs in the Amazon Cloud
Kevin Amorin, N. H. Shekar, Leena AlAufi
College of Computer and Information Science, Northeastern University, Boston, Massachusetts, USA

- 04:00 - 04:20pm: SCADA Cybersecurity Education from a Curriculum and Instruction Perspective
Raymond Albert
University of Maine at Fort Kent, Fort Kent, Maine, USA
- 04:20 - 04:40pm: Audio Steganography Using Stereo Wav Channels
Douglas C. Farmer, Daryl Johnson
Networking, Security & Systems Administration, Rochester Institute of Technology, Rochester, New York, USA
- 04:40 - 05:00pm: Potential Vulnerabilities of the NextGen Air Traffic Control System
Carl Giannatto, George Markowsky
University of Maine, Orono, Maine, USA
- 05:00 - 05:20pm: From Air Conditioner to Data Breach
George Markowsky, Linda Markowsky
University of Maine, Orono, Maine, USA
- 05:20 - 05:40pm: Scanning for Vulnerable Devices on the Internet of Things
Linda Markowsky, George Markowsky
University of Maine, Orono, Maine, USA
- 05:40 - 06:00pm: The Maine Cybersecurity Cluster's (MCSC): Virtual Cybersecurity
Virtual Cybersecurity Collaborative Learning Laboratory (VCCLL)
Glenn Wilson, Lynn Lovewell, Edward Sihler
University of Southern Maine, Portland, Maine, USA
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 8-SAM: CRYPTOGRAPHIC TECHNOLOGIES I
Chair: Prof. Michael Grimaila; Air Force Institute of Technology,
Wright-Patterson AFB, Ohio, USA
July 23, 2014 (Wednesday); 08:00am - 09:20am
(LOCATION: Ballroom 2)

08:00 - 08:20am: Modeling Continuous Time Optical Pulses in a Quantum Key
Distribution Discrete Event Simulation
 Logan O. Mailloux, Michael R. Grimaila, Douglas D. Hodson,
 Colin McLaughlin
 Air Force Institute of Technology, AFIT/ENV, Wright-Patterson
 AFB, Ohio, USA

08:20 - 08:40am: A Survey on Certificateless Encryption Techniques
 Fahad T. Bin Muhaya
 King Saud University, Riyadh, Kingdom of Saudi Arabia

08:40 - 09:00am: XXX FREE SLOT

09:00 - 09:20am: Privacy-Preserving Protocol for Reduced Cancer Risk on Daily
Physical Activity
 Hiroaki Kikuchi, Shigeta Ikuji, Manami Inoue
 Mathematical Sciences, Meiji University, Tokyo, Japan;
 Cyber Communication Inc., Minato-ku, Tokyo, Japan;
 National Cancer Center, Chuo-ku, Tokyo, Japan

SESSION 9-SAM & 10-SAM: CRYPTOGRAPHIC TECHNOLOGIES II + SECURITY MANAGEMENT I
Co-Chairs: Prof. Nizar Al Holou, University of Detroit Mercy, USA
Dr. Mehmet Sahinoglu, Auburn University, Montgomery, USA
XXX
July 23, 2014 (Wednesday); 09:20am - 12:00pm
(LOCATION: Ballroom 2)

09:20 - 09:40am: Formal Verification of Improved Numeric Comparison Protocol for
Secure Simple Paring in Bluetooth Using ProVerif
 Kenichi Arai, Toshinobu Kaneko
 Tokyo University of Science, Yamazaki Noda-City, Chiba, Japan

09:40 - 10:00am: Digital Identities and Accountable Agreements in Web Applications
 Joona Kannisto, Takeshi Takahashi, Jarmo Harju
 Tampere University of Technology, Tampere, Finland;
 National Institute of Info. & Communications Tech., Tokyo, Japan

10:00 - 10:20am: A Quantitative Index for Software Application Security Risk
 Mehmet Sahinoglu, Stephen Stockton, Scott Morton, David Ang
 Informatics Institute, Auburn University at Montgomery, Alabama, USA

10:20 - 10:40am: BREAK

10:40 - 11:00am: An Interoperability Framework for Security Policy Languages
 Amir Aryanpour, Edmond Parkash, Andrew Harmel-Law, Scott Davies
 Bedfordshire University, University Square, Luton, UK

11:00 - 11:20am: The Implementation of BGP Monitoring, Alarming, and Protecting System
by BGP-UPDATE-Based Method Using ECOMMUNITY in Real Time
 Je-Kuk Yun, BeomSeok Hong, Yanggon Kim
 Information Technology, Towson University, Towson, Maryland, USA

11:20 - 11:40am: FREE SLOT

11:40 - 12:00pm: FREE SLOT

12:00 - 01:20pm: LUNCH (On Your Own)

SESSION 11-SAM: SECURITY MANAGEMENT II + SECURITY EDUCATION
Chair: Dr. Diala Abi Haidar; Dar Al Hekma University, Saudi Arabia
July 23, 2014 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Ballroom 2)

01:20 - 01:40pm: Security Management of Bring-Your-Own-Devices
 Sara Gallotto, Weifeng Chen
 Southern New Hampshire University, Manchester, New Hampshire, USA;
 California University of Pennsylvania, California, Pennsylvania, USA

01:40 - 02:00pm: SIPPA Approach Towards a Privacy Preserving Voice-based
 Identity Solution
 Bon K. Sy
 Queens College & University Graduate Center, Flushing, New York, USA

02:00 - 02:20pm: Creating a Policy Based Network Intrusion Detection System Using
 Java Platform
 Samuel N. John, Charles U. Ndujiuba, Robert E. Okonigene,
 Chinonso E. Okereke, Miebaka E. Wakama
 Covenant University, Ogun State, Nigeria;
 Ambrose Alli University, Edo State, Nigeria

02:20 - 02:40pm: LearnFire: A Firewall Learning Tool for Undergraduate Cybersecurity
 Courses
 Alicia Kirkland, Jens Mache
 Lewis & Clark College, Portland, Oregon, USA

02:40 - 03:00pm: Teaching Cybersecurity to Wide Audiences with Table-Top Games
 Tadhg Fendt, Jens Mache
 Lewis & Clark College, Portland, Oregon, USA

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-SAM
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)

- 0. Steganography Through Block IO
 Joe Jevnik, Leonidas Deligiannidis
 Wentworth Institute of Technology, Boston, Massachusetts, USA
- 0. A Formal Data Flow Model to Study Network Protocol Encapsulation
 Inconsistencies
 Francois Barrere, Romain Laborde, Hicham Elkhoury,
 Abdelmalek Benzekri
 IRIT Laboratory - Toulouse University, Route de Narbonne, France
- 0. ...

SESSION 12-SAM: BIOMETRICS AND FORENSICS II
Chair: Prof. Craig Valli, Edith Cowan University, Australia
July 23, 2014 (Wednesday); 03:40pm - 06:00pm
(LOCATION: Ballroom 2)

03:40 - 04:00pm: XXX FREE SLOT

- 04:00 - 04:20pm: A Framework for Leveraging Cloud Computing to Facilitate Biometrics at Large-Scale
John K. Mitchell III, Syed S. Rizvi
Pennsylvania State University, Altoona, Pennsylvania, USA
- 04:20 - 04:40pm: Exploring Digital Forensics Tools in Backtrack 5.0 r3
XXX Ahmad Ghafarian, Syed Amin Hosseini Seno
University of North Georgia, Dahlonega, Georgia, USA;
Ferdowsi University of Mashhad, Virtual Study Center, Mashhad, Iran
- 04:40 - 05:00pm: A Method for Authentication Using Behavior Biometrics on WEB
Hiroshi Dozono, Naoto Yamasaki, Masanori Nakakuni
Saga University, Japan; Fukuoka University, Fukuoka, Japan
- 05:00 - 05:20pm: FREE SLOT
- 05:20 - 05:40pm: FREE SLOT
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 13-SAM: SECURITY APPLICATIONS

Co-Chairs: Dr. Hiroshi Dozono, Saga University, Japan

Dr. Yun Bai, University of Western Sydney, Australia

July 24, 2014 (Thursday); 08:00am - 10:40am

(LOCATION: Ballroom 2)

08:00 - 08:20am: Research on the Security of OAuth-Based Single Sign-On Service

Rong Huazhu, Ji Xiang, Da-Ren Zha

Chinese Academy of Sciences, Beijing, P. R. China

08:20 - 08:40am: An Approach and Its Implementation for Cloud Computing Security

Yun Bai, Khaled M. Khan, Chunsheng Yang

University of Western Sydney, Australia; Qatar University, Qatar;

National Research Council of Canada, Ottawa, ON, Canada

08:40 - 09:00am: Evaluating Gesture-Based Password and Impact of Input Devices

Lakshmidēvi Sreeramareddy, Atcharawan Janprasert, Jinjuan HeidiFeng

Towson University, Towson, Maryland, USA

09:00 - 09:20am: Robust Reversible Watermarking Scheme for Images

Alejandra Menendez-Ortiz, Claudia Feregrino-Urbe,

Jose Juan Garcia-Hernandez

INAOE, Puebla, Mexico;

Laboratory of Information Technologies, CINVESTAV, Mexico

09:20 - 09:40am: Component Rejuvenation for Security for Cloud Services

Chen-Yu Lee, Krishna M. Kavi, Mahadevan Gomathisankaran

University of North Texas, Denton, Texas, USA

09:40 - 10:00am: Ontology-based Privacy Setting Transfer Scheme on Social Networking Systems

Chen-Yu Lee, Krishna M. Kavi, Mahadevan Gomathisankaran

University of North Texas, Denton, Texas, USA

10:00 - 10:20am: A Distributable Hybrid Intrusion Detection System for Securing Wireless Networks

David Tahmoush

University of Maryland, University College, Maryland, USA

10:20 - 10:40am: Achieving Web Security by Increasing the Web Application Safety

Maryam Abedi, Navid Nikmehr, Mohsen Doroodchi

Shiraz University, Shiraz, Iran;

Cardinal Stritch University, Milwaukee, Wisconsin, USA

10:40a - 03:00p: During this period, SAM attendees are encouraged to participate in sessions belonging to ICWN'14, GCA'14, ABDA'14, ICOMP'14, and FECS'14 conferences. These sessions discuss topics that significantly overlap the scope of SAM'14.

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-SAM

July 24, 2014 (Thursday)

(LOCATION: Hallways of Ballrooms 1-5)

03:40 - 05:40pm: During this period, SAM attendees are encouraged to participate

in sessions belonging to ICWN'14, GCA'14, ABDA'14, ICOMP'14, and

FECS'14 conferences. These sessions discuss topics that significantly

overlap the scope of SAM'14.

SERP'14 & EEE'14 CONFERENCE SCHEDULES

**The 2014 International Conference on Software
Engineering Research and Practice (SERP'14)**

+

**The 2014 International Conference on e-Learning,
e-Business, Enterprise Information Systems,
and e-Government (EEE'14)**

Because of partial topical and technical overlap between SERP'14 and EEE'14 tracks, the schedule of EEE'14 is merged with the schedule of SERP'14, resulting a comprehensive schedule. It is hoped that this would encourage the participants of the two conferences to explore cross-fertilization of ideas. There are also a number of other sessions (not listed as part of these two conferences) that are of potential interest to SERP'14 and EEE'14 participants (sessions belonging to other joint conferences.) Therefore, you are encouraged to also check the schedules of other joint conferences. In particular, sessions in FECS'14, SWWS'14, ICAI'14, GEM'14, ICOMP'14, ESA'14, and IKE'14 conferences discuss topics that are within the scope of SERP'14 and EEE'14; these have been scheduled so that selected SERP'14 and EEE'14 attendees can also participate in them.

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

July 20

03:00p - 08:30p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)
- 08:30 - 08:45am: CONGRESS OPENING REMARKS - July 21, Monday:
Prof. Hamid R. Arabnia (Chair, Steering Committee & Coordinator)
University of Georgia, Georgia, USA;
Editor-in-Chief, The Journal of Supercomputing (Springer)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 08:45 - 09:45am: KEYNOTE LECTURE 1 - July 21, Monday:
SMART DATA FOR YOU AND ME: PERSONALIZED AND ACTIONABLE
PHYSICAL CYBER SOCIAL BIG DATA
Prof. Amit Sheth
Fellow, IEEE; LexisNexis Eminent Scholar; Founder/Executive
Director, Ohio Center of Excellence in Knowledge-enabled Computing
(Kno.e.sis) and Professor of Computer Science, Wright State
University, Ohio, USA
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 09:45 - 10:45am: KEYNOTE LECTURE 2 - July 21, Monday:
VISUALIZATION AND DATA MINING FOR HIGH DIMENSIONAL DATASETS
Prof. Alfred Inselberg
School of Mathematical Sciences, Tel Aviv University, Israel;
Senior Fellow, San Diego Supercomputing Center; Inventor of the
multidimensional system of Parallel Coordinates and author of
textbook "Parallel Coordinates: VISUAL Multidimensional Geometry",
(praised by Stephen Hawking among others.)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 10:45 - 11:45am: KEYNOTE LECTURE 3 - July 21, Monday:
BIG DATA ANALYTICS COGNITIVE ALGORITHMS
Dr. Leonid I. Perlovsky
Harvard University, Cambridge, Massachusetts, USA (School of
Engineering and Applied Sciences and Medical School Athinoula
Martinos Brain Imaging Center); The US Air Force Research Lab.,
USA; CEO, LP Information Technology, USA; Chair, IEEE Task Force
on The Mind and Brain; Recipient of John McLucas Award (the
highest US Air Force Award for basic research)
(LOCATION: Monte Carlo, Blue Man Group, main THEATER)
- 11:45a - 01:00p: LUNCH (On Your Own)
- SESSION 1-SERP: SOFTWARE ENGINEERING & APPLICATIONS + RELATED ISSUES +
EDUCATION & TRAINING
XXX: Co-Chairs: Prof. Shahriar Movafaghi; Southern New Hampshire
University, Manchester, New Hampshire, USA;
Dr. Joel Mana Goncalves; Prodesp - Tecnologia da Informacao,
Brazil;
Jasmeet Singh; University of Waterloo, Ontario, Canada
July 21, 2014 (Monday); 01:00pm - 03:00pm
(LOCATION: Sterling Room)
- 01:00 - 01:20pm: Experimental Evaluation of Hybrid Algorithm in Spectrum Based
Fault Localization
Jonghee Park, Eunseok Lee
Sungkyunkwan University; Samsung Electronics, South Korea
- 01:20 - 01:40pm: Electronic Private Library Portal
Shahriar Movafaghi
Southern New Hampshire University, Manchester, NH, USA
- 01:40 - 02:00pm: Positive Train Control: Concepts, Implementations, and Challenges
David J. Coe, Jeffrey H. Kulick
University of Alabama in Huntsville, Alabama, USA

- 02:00 - 02:20pm: Synchronous Gestures for Co-collaboration on Multiple Mobile Devices
Yuguang Zeng, Jingyuan Zhang
University of Alabama, Tuscaloosa, Alabama, USA
- 02:20 - 02:40pm: Development Of a Mathematical Model for Designing Reliable Information Systems and its Properties
Seilkhan Boranbayev, Askar Boranbayev, Sanzhar Altayev
L.N. Gumilyov Eurasian National University, Astana, Kazakhstan;
Nazarbayev University, Astana, Kazakhstan
- 02:40 - 03:00pm: The Case for an Open and Evolving Software Assurance Framework
Miron Livny, Barton Miller, Von Welch
Morgridge Institute for Research, Madison, Wisconsin, USA;
University of Wisconsin-Madison, Madison, Wisconsin, USA;
Indiana University, Bloomington, Indiana, USA

**03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION A-SERP-EEE
July 21, 2014 (Monday)
(LOCATION: Hallways of Ballrooms 1-5)**

0. Does Domain Knowledge Increase Creativity During Requirements Development: An Empirical Study
Sonu Sharma, Gursimran S. Walia
Microsoft Corporation, Fargo, North Dakota, USA;
North Dakota State University, Fargo, North Dakota, USA
- XXX
0. Embracing e-Learning as a Catalyst for Enhancing Program Viability, Marketability, and Curricular Innovation
Adel Abunawass, Edwin Rudolph
University of West Georgia, Carrollton, Georgia, USA
0. An Environment for Automatic Tests Generation from Use Case Specifications
Carolina Diniz Cunha, Mark Alan Junho Song
Computer Science Department, PUC MINAS, CEP, Brazil
0. ...

**SESSION 2-EEE: E-GOVERNMENT & ISSUES OF INTEREST TO GOVERNMENT, RELEVANT AGENCIES, AND PUBLIC ADMINISTRATION
XXX Co-Chairs: Prof. Eamon P. Doherty; Professor & Cybercrime Training Lab Director, Fairleigh Dickinson University, New Jersey, USA;
Prof. G. N. Pandey; Indian Institute of Technology Allahabad, India
July 21, 2014 (Monday); 03:40pm - 06:00pm
(LOCATION: Sterling Room)**

- 03:40 - 04:00pm: Scrivania: Public Services Execution and Semantic Search
Riccardo Cognini, Damiano Falcioni, Marco Maccari,
Alberto Polzonetti, Barbara Re
University of Camerino, Italy
- 04:00 - 04:20pm: Framework of e-Government Technical Infrastructure - Case of Estonia
Andres Kutt, Jaan Priisalu
Estonian Information System Authority, Estonia
- 04:20 - 04:40pm: Income Inequality and Information Communications Technologies: Causes, Solutions, and One Example
Darren Gudmundson
Income-Inequality.com, Canada; Business Transformation and Tech., Innovation Energy & Mines, Government of Manitoba, Canada

- 04:40 - 05:00pm: The Welcome Brazilian Idea About the United Nations Supporting the Regulation of Internet in Housing Rights, the Probable Failure of This Idea
Joel Mana Goncalves, Rodrigo Stabile
Companhia de Processamento de Dados do Estado de Sao Paulo, Brazil
- 05:00 - 05:20pm: E-Governance For Efficient Management to Reduce Corruption: An ICT Driven Paradigm
T. Sheela, Daniel Chandran
Anna University, Chennai, India;
University of Technology Sydney, Australia
- 05:20 - 05:40pm: Mobile Government Implementation for Government Service Delivery in Developing Countries: A South Africa Context
Olalekan Samuel Ogunleye, Jean-Paul Van Belle
CSIR Meraka Institute, Pretoria, South Africa;
University of Cape Town, South Africa
- 05:40 - 06:00pm: Cyber Education - Security For Citizenship
Joel Mana Goncalves, Rodrigo Stabile
Companhia de Processamento de Dados do Estado de Sao Paulo, Brazil
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the beginning of this book for details)**
- 09:00 - 11:45pm: CONFERENCE RECEPTION DINNER / SOCIAL
July 21 - Monday; 09:00pm - 11:45pm
(LOCATION: Ballrooms 1-5)**

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 3-SERP: SOFTWARE ENGINEERING & WEB BASED SYSTEMS + OPEN SOURCE SOFTWARE, OBJECT ORIENTED TECHNOLOGY + SOA
XXX Co-Chairs: Dr. Dusan Sormaz; Ohio University, Athens, Ohio, USA;
Dr. Jang Yeol Kim; Korea Atomic Energy Research
Institute (KAERI), Daejeon, South Korea
July 22, 2014 (Tuesday); 08:00am - 10:20am
(LOCATION: Sterling Room)

08:00 - 08:20am: Clustering Analysis for Object Formation in Software Modeling
 Dusan Sormaz
 Ohio University, Athens, Ohio, USA

08:20 - 08:40am: Adding Semantic Web Technology to the Object-Oriented Method
 for Interoperability
 Priyatham Anisetty, Paul Young
 Acxiom Corporation, Conway, Arkansas, USA;
 University of Central Arkansas, Conway, Arkansas, USA

08:40 - 09:00am: Domain-Driven Model Inference Applied to Web Applications
 Sebastien Salva, William Durand
 LIMOS, University of Auvergne, France;
 LIMOS, Blaise Pascal University, France

09:00 - 09:20am: A Web-based Visual Analytic System for Understanding the
 Structure of Community Land Model
 Yang Xu, Dali Wang, Tomislav Janjusic, Xiaofeng Xu
 University of Tennessee, Knoxville, Tennessee, USA;
 Climate Change Science Institute, Oak Ridge National Laboratory,
 Tennessee, USA; Computer Science and Mathematics Division, Oak
 Ridge National Laboratory, Tennessee, USA

09:20 - 09:40am: Source Code Control Workflows for Open Source Software
 Kevin A. Gary, Ziv Yaniv, Ozgur Guler, Kevin Cleary, and
 Andinet Enquoharie
 Arizona State University, Mesa, Arizona, USA;
 Children's National Medical Center, Washington, DC, USA;
 Kitware Inc., Carrboro, North Carolina, USA

09:40 - 10:00am: Application of Fuzzy Inference System in Measuring
 Maintainability of Object-Oriented Software
 Nasib Singh Gill, Meenakshi Sharma
 M.D. University, Rohtak, India

10:00 - 10:20am: XXX Digital Divide or Digital Interest
 Elliott S. Lynn
 American Public University, USA

10:00 - 10:20am: BREAK

- SESSION 4-SERP: EMBEDDED SOFTWARE SYSTEMS + CLOUD + SOFTWARE DESIGN & APPLICATIONS + ENTERPRISE ARCHITECTURES + GAME DESIGN + GUI**
XXX Co-Chairs: Dr. Jang Yeol Kim; Korea Atomic Energy Research Institute (KAERI), Daejeon, South Korea;
Prof. Nasib Singh Gill, M. D. University, Haryana, India;
Dr. Lina Khalid; Zarqa University, Amman, Jordan
July 22, 2014 (Tuesday); 10:20am - 01:00pm
(LOCATION: Sterling Room)
- 10:20 - 10:40am: Establishing Testbed for Functional Testing of Embedded System
 Jang Yeol Kim, Kwang Seop Son, Young Jun Lee, Se Woo Cheon, Kyoung Ho Cha, Jang Soo Lee, Kee Choon Kwon
 Korea Atomic Energy Research Institute (KAERI), Daejeon, Republic of Korea, South Korea
- 10:40 - 11:00am: Decomposed Processes in Cloud BPM: Techniques for Monitoring and The Use of OLC
 Jose Martinez Garro, Patricia Bazan, Javier Diaz
 Universidad Nacional de La Plata, UNLP, La Plata, Argentina;
 LINTI - UNLP, Universidad Nacional de La Plata, Argentina
- 11:00 - 11:20am: Proposal of Avatar Generation System Based on Design According to Generation of Comic Character
 Reiko Kuwabara, Takayuki Fujimoto
 Graduate School of Engineering, Toyo University, Japan
- 11:20 - 11:40am: Proposal on Feeding Support Application Software Based on Research into the Effect of a "Fasting State" on "Mental Alertness"
 Motoichi Adachi, Takayuki Fujimoto
 Graduate School of Engineering, Toyo University, Japan
- 11:40 - 12:00pm: A Methodology for Development of Enterprise Architecture of PPDR Organisations
 Wilmuth Muller, Frank Reinert
 Fraunhofer Institute of Optronics, System Technologies and Image Exploitation IOSB, Germany
- 12:00 - 12:20pm: Game-Based Learning Development Process: An Exploratory Analysis of Game Development Companies in Brazil
 Joao Coelho Neto, Sheila Reinehr, Andreia Malucelli
 UENP, Brazil; PUCPR, Brazil
- 12:20 - 12:40pm: DIRCE - Design of Interaction and Elicitation of Requirements Focusing on the Communication and Exploration of Ideas: Experiences of Use in Content Creation Systems for Digital Television
 Marilia S. Mendes, Elizabeth S. Furtado
 Federal University of Ceara, Brazil;
 University of Fortaleza, Brazil
- 12:40 - 01:00pm: Towards Automatic GUI Testing Using Task and Dialog Models
 Eman M. Saleh
 Software Engineering Department, Faculty of Information Technology, Applied Science University, Amman, Jordan
- 01:00 - 02:00pm: LUNCH (On Your Own)**

- SESSION 5-EEE: E-COMMERCE, DSS, CLOUD COMPUTING, WEB APPLICATIONS & TOOLS, MANAGEMENT & SOCIAL NETWORKS**
XXX Co-Chairs: Dr. Charles V. Balch; University of Northern Arizona, USA; Edmund Balogun; The City University of New York, City College, New York, USA
XXX July 22, 2014 (Tuesday); 02:00pm - 05:40pm
(LOCATION: Sterling Room)
- 02:00 - 02:20pm: E-Commerce in Saudi Arabia: Acceptance and Implementation Difficulties
 Eyad Makki
 The Catholic University of America, Washington, DC, USA
- 02:20 - 02:40pm: Novel Approach to Build Audit Rule Ontology for Healthcare Decision Support Systems
 Numanul Subhani, Robert D. Kent
 University of Windsor, Windsor, Ontario, Canada
- 02:40 - 03:00pm: New Windows Rootkit Technologies for Enhancing Digital Rights Management in Cloud Computing Environments
 Woei-Jiunn Tsaur, Jia-Xin Wu
 Da-Yeh University, Taiwan, R.O.C.
- 03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION B-SERP-EEE**
July 22, 2014 (Tuesday)
(LOCATION: Hallways of Ballrooms 1-5)
- 0. Program Dependence Graph for Python's Dynamic Reference
 Jangwu Jo, Hye-Yeon Lim, Dae-Seong Kang
 Dong-A University, Busan, South Korea
 - 0. Symbolic Model Checking Applied to Timing Diagrams
 Amanda Danielle Lima de Oliveira Tameirao, Mark Alan Junho Song
 Pontificia Universidade Catolica de Minas Gerais, Brazil
 - 0. A Real Time Monitoring System To Measure The Quality Of The Italian Public Administration Websites
 Francesco Donini, Maurizio Martinelli, Luca Vasarelli
 Istituto di Informatica e Telematica, Consiglio Nazionale delle Ricerche, Pisa, Italy
 - 0. XXX Can We Use and Make Carbon-Copy Relationship for Recommending Developers to Fix Bugs
 Jungil Kim, Eunjoo Lee
 Kyungpook Natinal University, Deagu, Korea
 - 0. ...
- SESSION 5-EEE: Continued ... E-COMMERCE, DSS, CLOUD COMPUTING, WEB APPLICATIONS & TOOLS, MANAGEMENT & SOCIAL NETWORKS**
(LOCATION: Sterling Room)
- 03:40 - 04:00pm: Towards Effective Bus Transit Services in South Africa: automated passenger authentication
 Bassey Isong, Egbe Dominic, Gilbert Dzawo
 University of Venda Thohoyandou, South Africa
- 04:00 - 04:20pm: Technology as a Pedagogical Tool: To Use or Not to Use
 Tabby Harraf
 University of Northern Colorado, Colorado, USA
- 04:20 - 04:40pm: Correlation of Employee Performance and Electronic Employee Monitoring
 Charles Balch
 Northern Arizona University, Arizona, USA

- 04:40 - 05:00pm: Using Linked Open Data to Enrich a Corporate Memory of Universities
Cristal Karina Galindo Duran, R. Carolina Medina Ramirez,
and Mihaela Juganaru Mathieu
Universidad Autonoma Metropolitana, Unidad Iztapalapa, Mexico;
Institut H. Fayol, Ecole Nationale Superieure des Mines de
Saint Etienne, France
- 05:00 - 05:20pm: A Study of Poster and Viewer Participation in SNS
Shwu-Min Horng
National Chengchi University, Taiwan, R.O.C.
- 05:20 - 05:40pm: XXX Teaching IPAD Forensics Online With a MOOC
Eamon P. Doherty
Professor and Cybercrime Training Lab Director,
Fairleigh Dickinson University, New Jersey, USA
- 05:40 - 06:00pm: FREE SLOT
- 06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES**
(Please see the lists at the begining of this book for details)

06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)

SESSION 6-SERP: ENERGY EFFICIENT SOFTWARE DESIGN, REQUIREMENTS ENGINEERING, COST ESTIMATION, SOFTWARE ENGINEERING & SAFETY, SOFTWARE QUALITY, ERROR CHECKING, DEBUGGING METHODS
XXX Co-Chairs: Prof. G. N. Pandey; Indian Institute of Technology Allahabad, India;
Prof. Nasib Singh Gill, M. D. University, Haryana, India
July 23, 2014 (Wednesday); 08:00am - 10:00am
(LOCATION: Sterling Room)

08:00 - 08:20am: Empirical Investigation of Systems Cost Estimation Models in the Limpopo Province of South Africa: A Requirement Modelling Problem
 Benson Moyo, Magda Huisman
 University of Venda, South Africa;
 North-West University, South Africa

08:20 - 08:40am: Environment for Requirements Elicitation Supported by Ontology-Based Conceptual Models: A Proposal
 Joselaine Valaski, Sheila Reinehr, Andreia Malucelli
 Post-Graduate Program in Information Technology at Pontificia Universidade Catolica do Parana PUCPR, Brazil

08:40 - 09:00am: Automation of Energy Performance Evaluation of Software Applications on Servers
 Jasmeet Singh, Veluppillai Mahinthan, Kshirasagar Naik
 University of Waterloo, Waterloo, Ontario, Canada

09:00 - 09:20am: UAH OnTrack: Precision Navigation System for Research on The Software Safety Issues of Positive Train Control
 Scott Schiavone, Sjohn Chambers, Sunny Patel, Lee Ann Hanback, David J. Coe, Jason Winningham, Earl Wells, George Petznick, and Jeffrey H. Kulick
 University of Alabama in Huntsville, Alabama, USA;
 Consulting Railway Expert, USA

09:20 - 09:40am: A Quality Assurance Approach to Technical Debt
 Zadia Codabux, Byron J. Williams, Nan Niu
 Mississippi State University, Starkville, Mississippi, USA

09:40 - 10:00am: Prioritization of Artifacts for Unit Testing Using Genetic Algorithm Multi-objective Non Pareto
 Eduardo Noronha De Andrade Freitas, Auri Marcello Rizzo Vicenzi, and Celso Goncalves Camilo Jr.
 Instituto Federal de Goias, Brazil;
 Universidade Federal de Goias, Brazil

10:00 - 10:20am: BREAK

SESSION 7-SERP: SOFTWARE DEVELOPMENT STRATEGIES, AGILE TECHNOLOGY, BUSINESS MODELS, REUSE + CLOUD AND TOOLS
XXX Co-Chairs: Darren Gudmundson; Income-Inequality.com, Canada;
Dr. Byron J. Williams; Mississippi State University, USA;
Dr. T. Sheela; Anna University, India;
Benson Moyo; University of Venda, South Africa
July 23, 2014 (Wednesday); 10:20am - 12:20pm
(LOCATION: Sterling Room)

10:20 - 10:40am: Contemporary Build Systems and Techniques for Improvement
 Jason White, Kay Zemoudeh
 California State University, San Bernardino, California, USA

- 10:40 - 11:00am: Java Core API Migration: Challenges and Techniques
Victor L. Winter, Jonathan Guerrero, Carl Reinke, James T. Perry
University of Nebraska at Omaha, Omaha, Nebraska, USA;
Sandia National Laboratories, Albuquerque, New Mexico, USA
- 11:00 - 11:20am: ExpTool: A Tool to Conduct, Package and Replicate Controlled Experiments in Software Engineering
Joao Pucci Neto, Lilian Passos Scatalon, Rogerio Eduardo Garcia, Ronaldo Celso Messias Correia, Celso Olivete Junior
Sao Paulo State University "Julio de Mesquita Filho", Brazil
- 11:20 - 11:40am: A Comparative Study On Usage Of Traditional and Agile Software Development Methodologies in Software Industry of Asia
Syed Faisal Ahmed Bukhari, Hira Khan
Sir Syed University of Engineering and Tech., Karachi, Pakistan
- 11:40 - 12:00pm: The Position of Component Certification in CBSE Activities
Lena Khalid
Zarqa University, Jordan
- 12:00 - 12:20pm: Software Projects' Size Developed by Mexican Companies
Jorge Aguilar Cisneros, Moises Sanchez, Carlos Fernandez, Everth Rocha, David Martinez, Jose Figueroa
Univ. Popular Autonoma del Estado de Puebla, Puebla, Mexico;
Instituto de Computacion, Univ. Tecnologica de la Mixteca, Mexico
- 12:20 - 01:20pm: **LUNCH (On Your Own)**
- SESSION 8-EEE: LEARNING & TEACHING METHODS, E-LEARNING + EDUCATIONAL TOOLS, AND RELATED ISSUES**
XXX Chair: Dr. Larry Wang, Southern Polytechnic State University, USA
July 23, 2014 (Wednesday); 01:20pm - 03:00pm
(LOCATION: Sterling Room)
- 01:20 - 01:40pm: Integrating Webwork In Calculus III
Larry Wang
Southern Polytechnic State University, Marietta, Georgia, USA
- 01:40 - 02:00pm: Students' Perception Towards Soft-CLIL in the Basque Secondary Schools
Chiharu Nakanishi, Hodaka Nakanishi
Kunitachi College of Music, Tokyo, Japan;
Teikyo University, Tokyo, Japan
- 02:00 - 02:20pm: Exploring the Requirements and Infrastructure to Develop Online Degree Programs
Ingrid A. Buckley, Narang Hira
Tuskegee University, Tuskegee, Alabama, USA
- 02:20 - 02:40pm: Building a Frame-Based Content Generation Approach for APT Prevention Education
Yuan-Hsin Tung, Shian-Shyong Tseng, Yuh-Jye Wang, Hwai-Ling Shan
Telecommunication Lab., Chunghwa Telecom Co., Ltd., Taiwan, R.O.C.;
Asia University, R.O.C.
- 02:40 - 03:00pm: Using Forensic Images to Teach About White Collar Crime Online
Eamon Doherty, Ester Doherty, Elly Goei
School of Administrative Science, Fairleigh Dickinson University,
Teaneck, New Jersey, USA

03:00 - 03:40pm: BREAK & POSTER/DISCUSSION SESSION C-SERP-EEE
July 23, 2014 (Wednesday)
(LOCATION: Hallways of Ballrooms 1-5)

- O. Self-optimization in Autonomic Computing System Based on the Methodology of Bee Swarm Intelligence
 Anselmo L. O. Nhane, Mark Song
 Pontical Catholic University of Minas Gerais Belo Horizonte, Brazil
- O. Using Formal Concept Analysis to Study Social Coding in GitHub
 Otmar Martins Pereira Junior, Luis Henrique Zarate, Humberto Torres Marques Neto, Mark Alan Junho Song
 Pontical Catholic University of Minas Gerais, Brazil
- O. ICT in Math Teaching: A Systematic Review
 Yu-Wen Huang, Janet Mei-Chuen Lin, Yi-Jiun Wu, & Yu-Tzu Lin
 National Taiwan Normal University, Taiwan, R.O.C.
- O. ...

SESSION 9-EEE: E-BUSINESS, E-COMMERCE, E-BANKING, ENTERPRISE INFORMATION SYSTEMS, AND SECURITY
Co-Chairs: Dr. Charles V. Balch; University of Northern Arizona, USA
July 23, 2014 (Wednesday); 03:40pm - 05:20pm
(LOCATION: Sterling Room)

03:40 - 04:00pm: A Three Tier Enterprise Information System
 D. Yoon, S. Duggineni
 CIS Department, University of Michigan - Dearborn, Michigan, USA

04:00 - 04:20pm: How to Create an E-Advertising Domain Model: the AEADS Approach
 Alaa A. Qaffas, Alexandra I. Cristea
 The University of Warwick, Coventry, UK

04:20 - 04:40pm: Analysis and Impact of Bias in Market Research
 Edmund Balogun
 The City University of New York, City College, New York, USA

04:40 - 05:00pm: Exploring Mobile Computing Trends in Saudi Arabia: An Initial Investigation of M-Government and M-Business
 Mutlaq B. Alotaibi
 Vice Dean for Academic Affairs, College of Computer & Information Sciences, Al Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia

05:00 - 05:20pm: XXX Moving Legacy Device Forensics to an Online Format
 Eamon P. Doherty, Ester Doherty, Elly Goei
 Professor & Cybercrime Training Lab Director, Fairleigh Dickinson University, New Jersey, USA

05:20 - 05:40pm: FREE SLOT

05:40 - 06:00pm: FREE SLOT

06:00 - 09:00pm: TUTORIALS + PANEL DISCUSSIONS + ADDITIONAL INVITED LECTURES
(Please see the lists at the begining of this book for details)

- 06:45a - 05:00p: REGISTRATION (Second Floor, Conference Lobby: 1-5)**
- SESSION 10-SERP: SOFTWARE ENGINEERING & WEB BASED SYSTEMS + OBJECT ORIENTED TECHNOLOGY + SOA**
XXX Co-Chairs: Dr. Eman Saleh; Applied Science University, Jordan;
Prof. G. N. Pandey; Indian Institute of Technology
Allahabad, India
July 24, 2014 (Thursday); 08:00am - 09:40am
(LOCATION: Sterling Room)
- 08:00 - 08:20am: Towards a Formal Framework for Hybrid Analysis of Composite Web Services
 May Haydar, Hesham Hallal
 Universite de Montreal, Montreal, QC, Canada;
 Fahad Bin Sultan University, Saudi Arabia
- 08:20 - 08:40am: Comparative Evaluation of Executable Modeling Language for Object-Oriented Modeling Education
 Seiko Akayama, Kenji Hisazumi, Shin Kuboaki, Syuhei Hiya, and Akira Fukuda
 Kyushu University, Japan; Afrel Co.,Ltd., Tokyo, Japan
- 08:40 - 09:00am: Effectiveness of Coupling Metrics in Identifying Change-Prone Object-Oriented Classes
 Mahmoud Elish, Ali Al-Zouri
 King Fahd University of Petroleum and Minerals, Saudi Arabia
- 09:00 - 09:20am: Effective Representation of Object-oriented Program: The Key to Change Impact Analysis
 Isong Bassey, Obeten Ekabua
 North-West University, Mafikeng, South Africa
- 09:20 - 09:40am: Web Based Automated Workflow System for Employees' Welfare and Loan Scheme Using Lightweight Methodology
 Okonigene Robert E., John-Otumu M. A., John Samuel N. Ambrose Alli University, Ekpoma, Edo State, Nigeria;
 Covenant University, Ota, Ogun State, Nigeria
- SESSION 11-SERP: SOFTWARE ENGINEERING & APPLICATIONS + RELATED ISSUES + EDUCATION AND TRAINING**
XXX Chair: Dr. Eman Saleh; Applied Science University, Jordan
July 24, 2014 (Thursday); 09:40am - 11:20am
(LOCATION: Sterling Room)
- 09:40 - 10:00am: Easel: Purely Functional Game Programming
 Bryant Nelson, Joshua Archer, J. Nelson Rushton
 Texas Tech University, Texas, USA
- 10:00 - 10:20am: Efficient and Effective Training in New Languages to Developers
 Milica Brajaktarovic
 Hawaii Pacific University, Honolulu, Hawaii
- 10:20 - 10:40am: BREAK**
- 10:40 - 11:00am: An Experiment Comparing Easel with Pygame
 Josh Archer, Bryant Nelson, Nelson Rushton
 Texas Tech University, Texas, USA
- 11:00 - 11:20am: Automatic High Performance Structural Optimisation for Agent-based Models
 A. V. Husselmann, K. A. Hawick
 Massey University, Auckland, New Zealand;
 University of Hull, Hull, UK

- SESSION 12-SERP: SOFTWARE ENGINEERING & MANAGEMENT + DIVERSITY ISSUES + SOFTWARE ARCHITECTURE & DESIGN PATTERNS + SPECIFICATION METHODS + PROCESS MINING + AUTONOMIC COMPUTING**
XXX Chair: Dr. Dusan Sormaz; Ohio University, Athens, Ohio, USA
July 24, 2014 (Thursday); 11:20am - 01:20pm
(LOCATION: Sterling Room)
- 11:20 - 11:40am: Female Factor and Team Projects - A Social Sensitivity Perspective
 Sourabh Khosla, Lisa L. Bender, Gursimran S. Walia, Kendall Nygard
 North Dakota State University, Fargo, North Dakota, USA;
 Trinity University, San Antonio, Texas, USA
- 11:40 - 12:00pm: Relational Metrics Model for Software Configuration Management
 Hassan Pournaghshband, Charles Donald Carson
 Southern Polytechnic State University, Marietta, Georgia, USA
- 12:00 - 12:20pm: Modeling And SEF-Configuring SAAS Application
 Nadir K. Salih
 Harbin Institute of Technology, P. R. China
- 12:20 - 12:40pm: A Place for Everything and Everything in Its Place
 Carlo Montangero, Laura Semini
 Dipartimento di Informatica, Universita di Pisa, Italy
- 12:40 - 01:00pm: Architecture and Design of Corrosion Prediction Software Multicorp
 Arkopaul Sarkar, Dusan Sormaz
 Ohio University, Athens, Ohio, USA
- 01:00 - 01:20pm: Formal Specification-Driven Development
 Richard Rutledge, Sheryl Duggins, Dan Lo, Frank Tsui
 Georgia Institute of Technology, Atlanta, Georgia, USA;
 Southern Polytechnic State University, Marietta, Georgia, USA
- 01:20 - 02:00pm: LUNCH (On Your Own)**
- SESSION 13-EEE: LEARNING & TEACHING METHODS, E-LEARNING + EDUCATIONAL TOOLS, & RELATED ISSUES**
XXX Co-Chairs: Edmund Balogun; The City University of New York, City College, New York, USA;
Dr. Reyna Carolina Medina-Ramirez; Metropolitan Autonomous University (UAM-I), Mexico
July 24, 2014 (Thursday); 02:00pm - 04:20pm
(LOCATION: Sterling Room)
- 02:00 - 02:20pm: KumuCloud: A Cyber Learning Tool
 Mehdi R. Zargham and M. R. Sayeh
 Professor and Chair, Department of Computer Science,
 University of Dayton, Dayton, Ohio, USA;
 Southern Illinois University, Illinois, USA
- 02:20 - 02:40pm: XXX FREE SLOT
- 02:40 - 03:00pm: In-Depth Assessment with Multiple Choice: The Reverse Multiple-choice Method
 Indu M. Anand
 Sushila Publications, Chelmsford, Massachusetts, USA
- 03:00 - 03:20pm: BREAK**

- 03:20 - 03:40pm: The Development Of Technology Of Creation and Optimum Planning And Distribution Of Resources of Integrated Educational Portal
Seilkhan Boranbayev, Bahtiyar Mukashev, Askar Boranbayev,
and Sanzhar Altayev
L.N. Gumilyov Eurasian National University, Kazakhstan;
Nazarbayev University, Kazakhstan
- 03:40 - 04:00pm: E-Learning Through Social Networking Sites-Case Study Facebook
Karim Hadjar, Khaled Riad Hammoud
Ahlia University, Al Manama, Bahrain
- 04:00 - 04:20pm: XXX FREE SLOT
- 04:20 - 04:40pm: FREE SLOT
- 04:40 - 05:00pm: FREE SLOT