### IEEE/ACIS ICIS2015 Conference Program Overview (ver0.99)

#### Sunday, June 28, 2015

| 16:00–18:00 | Registration(Foyer) |

#### Monday, June 29, 2015

| 9:00–10:00 | Registration(Foyer) |
| 10:00–11:00 | Opening(Room Z) |
| 11:00–12:00 | Keynote Address(Room Z) |
| 12:00–13:00 | Lunch |
| 13:00–15:05 | Hardware and VLSI, Speech, Dialog, and Text Recognition, Security |
| 15:05–15:30 | Coffee Break(Foyer) |
| 15:30–18:00 | Hardware and Optimization, Intelligent Systems, Network |

#### Tuesday, June 30, 2015

| 8:30–10:10 | Special Session 1, Workshop 1, Workshop 3 |
| 10:10–10:20 | Coffee Break(Foyer) |
| 10:20–12:00 | Special Session 1, Workshop 1 / SERA, Workshop 3 |
| 12:00–13:00 | Lunch |
| 13:00–15:05 | E-commerce and Multimedia, Humans’ Behavior and Application, Workshop 3 |
| 15:05–15:30 | Coffee Break(Foyer) |
| 15:30–17:35 | Clustering and Classification, Big Data and Processing, Workshop 3 |
| 18:30–20:30 | Dinner Banquet & Award Presentation(Room Y) |

#### Wednesday, July 1, 2015

| 8:30–10:10 | Cloud and Load Balancing, Biometrics and Security, Software and Modeling |
| 10:10–10:20 | Coffee Break(Foyer) |
| 10:20–12:00 | IoT and Mobile Systems, Frontier of Network and Mining, Software Development |
| 12:00–13:00 | Lunch |
| 13:00–15:05 | Data Mining and Application, Application of Semantics and Modeling, Smart Detection |
Monday, June 29, 2015

**13:00-15:05 Session 1A  Hardware and VLSI  Room A**

FPGA Implementation of a Low Complexity Steganographic System for Digital Images  
*Williams Antonio Pantoja Laces, Jose Juan Garcia-Hernandez*

Fully Pipelined VLSI Architecture of a Real-Time Block-Based Object Detector for Intelligent Video Surveillance Systems  
*Min-Chun Tuan, Shih-Lun Chen*

A Compact Design of n-Bit Ripple Carry Adder Circuit using QCA Architecture  
*Tania Sultana Rimy, Nusrat Jahan Lisa, Rajon Bardhan, Tangina Firoz Bithee, Zinia Tabassum*

Optimization of Cross-lingual LSI Training Data  
*Roger Bradford, John Pozniak*

Communication System based on Chaotic Delayed Feedback Oscillator with Switched Delay  
*Mikhail Prokhorov, Danil Kulminskiy, Anatoly Karavaev, Vladimir Ponomarenko*

**13:00-15:05 Session 1B  Speech, Dialog, and Text Recognition  Room B**

Recognition of Offline Handwritten Hindi Text Using Middle Zone of the Words  
*Naresh Kumar Garg, Lakhwinder Kaur, Mansih Jindal*

HMM-Based Vietnamese Speech Synthesis  
*Trinh Quoc Son*

A Voice Dialog Editor Based on Finite State Transducer Using Composite State for Tablet Devices  
*Keitaro Wakabayashi, Daisuke Yamamoto, Naohisa Takahashi*

Syllable-based Myanmar Language Model for Speech Recognition  
*Yadana Thein, Wunna Soe*

**13:00-15:05 Session 1C  Security  Room C**

Secure in-vehicle Systems against Trojan Attacks  
*Masaya Yoshikawa, Kyota Sugioka, Yusuke Nozaki, Kensaku Asahi*

A Kernel based Atanassov's Intuitionistic Fuzzy Clustering for Network Forensics and Intrusion Detection  
*Anupam Panwar*

Deploying Agents in the Network to Detect Intrusions  
*Shankar Banik, Luis Pena*
Quantifying Security Risk by Measuring Network Risk Conditions
*Candace Suh-Lee, Juyeon Jo*

Utilizing NFC to Secure Identification
*Robert Gripentog, Yoohwan Kim*

15:30-18:00  **Session2A**  Hardware and Optimization  **Room A**

Selective Data Buffering Module for Unified Hybrid Storage System
*Kihyun Park, Su-Kyung Yoon, Shin-Dug Kim*

Dual RAID Techniques for Ensuring High Reliability and Performance in SSD
*Sohyun Koo, Se Jin Kwon, Sunsoo Kim, Tae-Sun Chung*

Fast Bootstrapping Method for the Memory-Disk Integrated Memory System
*Sangjae Nam, Su-Kyung Yoon, Shin-Dug Kim*

Accelerating Storage Access by Combining Block Storage with Memory Storage
*Shuichi Oikawa*

Dynamic Binary Translation in a Type-II Hypervisor for CAVIUM MIPS64 Based Systems
*Qurrat Ulain, Usama Anwar, Asad Raza, Abdul Qadeer, Ghulam Mustafa, Abdul Waheed*

15:30-18:00  **Session2B**  Intelligent Systems  **Room B**

A Scoring Rule-based Truthful Demand Response Mechanism
*Takayuki Ito, Keisuke Hara*

Automated Negotiating Agent based on Estimated Expected Utility of Evolutionary Stable Strategies
*Akiyuki Mori, Takayuki Ito*

Single-Object Resource Allocation in Multiple Bid Declaration with Preferential Order
*Kengo Saito, Toshiharu Sugawara*

Formal Specification and Reasoning for Situated Multi-agent System
*Zhuang Li, Huaikou Miao*

Multiagent-based Distributed Backup System for Individuals
*Takahiro Uchiya, Motohiro Shibakawa, Tetsuo Kinoshita, Ichi Takumi*

15:30-18:00  **Session2C**  Network  **Room C**

*Saima Jamil, Saqib Jamil, Sheeraz Ahmed, Muhammad Zubair, Farman Sikandar*

SONET over RPR
*Ammar Hamad, Michel Kadoch*
Social Routing: A Novel Routing Protocol for Delay Tolerant Network based on Dynamic Connectivity
Quoc Nguyen Viet, Pham Van Phuoc, Trinh Quoc Son, Lung Vu Duc

Empirical Evaluation of Designing Multicasting Network with Minimum Delay Variation
Nicklaus Rhodes, Shankar Banik

Opportunistic Wireless Network Coding Based On Small-time Scale Traffic Prediction
Rui Zhang, Jie Li, Quan Qian, Wei Feng

A Novel Contention Window Backoff Algorithm for IEEE 802.11 Wireless Networks
Ikram Syed, Bosung Kim, Byeong-Hee Roh, Il-Hyuk Oh

Tuesday, June 30, 2015

13:00-15:05 Session 3A E-commerce and Multimedia Room A

Effective Gaze Writing with Support of Text Copy and Paste
Reo Kishi, Takahiro Hayashi

A Multimedia-Oriented Digital Ecosystem: a New Collaborative Environment
Solomon Asres Kidanu, Yudith Cardinale, Gilbert Tekli, Richard Chbeir

Development of Mobile Voice Navigation System Using User-Based Mobile Maps Annotations
Tomohiro Yanagi, Daisuke Yamamoto, Naohisa Takahashi

3D Web Applications in E-Commerce: A Secondary Study on the Impact of 3D Product Presentations Created with HTML5 and WebGL
Jens Geelhaar, Gabriel Rausch

Some Observations On Online Advertising: A New Advertising System
Dapeng Liu, Shaochun Xu, Lichao Chen, Chunning Wang

13:00-15:05 Session 3B Humans’ Behavior and Application Room B

A Novel Architecture for Learner’s Profiles Interoperability
Leila Ghorbel, Corinne Amel Zayani, Ikram Amous

A Human Behavior Processes Database Prototype System for Surgery Support
Zhang Zuo, Kenta Oku, Hung-Hsuan Huang, Kyoji Kawagoe

Searching Human Actions based on a Multi-dimensional Time Series Similarity Calculation Method
Yu Fang, Kosuke Sugano, Kenta Oku, Hung-Hsuan Huang, Kyoji Kawagoe

Automatic Generation of Programming Exercises for Learning Programming Language
Akiyoshi Wakatani, Toshiyuki Maeda

eMedicalHelp: A Customized Medical Diagnostic Application: Is a single questionnaire enough to measure stress?
Hedieh Ranjbartabar, Amir Maddah, Manolya Kavakli
15:30-17:35 Session 4A  Clustering and Classification  Room A

Automatic Extraction of Text Regions from Document Images by Multilevel Thresholding and K-means Clustering
Hoai Nam Vu, Tuan Anh Tran, In Seop Na, Soo-Hyung Kim

Automated Generation of Hierarchic Image Database with Hybrid Method of Ontology and GMM-based Image Clustering
Ryosuke Yamanishi, Ryoya Fujimoto, Yuji Iwahori, Robert J. Woodham

Automated Thresholding of Lung CT Scan for Artificial Neural Network based Classification of Nodules
Sheeraz Akram, Muhammad Younus Javed, Ayaz Hussain

Nearest Multi-Prototype Based Music Mood Classification
Babu Kaji Baniya, Joonwhoan Lee, Choong Seon Hong

15:30-17:35 Session 4B  Big Data and Processing  Room B

Fast and Effective Content Based Document Information Retrieval System
Moon Soo Cha, So Yeon Kim, Jae Hee Ha, Min-June Lee, Young-June Choi, Kyung-Ah Sohn

A Feature Selection Method for Comparision of Each Concept in Big Data
Takafumi Nakanishi

Generalized Entropy based Semi-Supervised Learning
Taocheng Hu, Jinhui Yu

Investigation of Localized Sentiment for a Given Product by Analyzing Tweets
Syed Akib Anwar Hridoy, Faysal Ahmed, Mohammad Samiul Islam, M. Tahmid Ekram, Mohammad Rashedur Rahman

A Big Data Approach to Enhance the Integration of Access Control Policies for Web Services
Mohammed Alodib, Zaki Malik

Wednesday, July 1, 2015

8:30-10:10 Session 5A  Cloud and Load Balancing  Room A

Implementation of Modified Overload Detection Technique with VM Selection Strategies Based on Heuristics and Migration Control
Mohammad Alaul Haque Monil, M. Rashedur Rahman

Clustered Based VM Placement Strategies
Mohammed Rashid Chowdhury, Mohammad Raihan Mahmud, M Rashedur Rahman

Emerald: Enhance Scientific Workflow Performance with Computation Offloading to the Cloud
Hao Qian, Daniel Andresen
Feasibility Analysis for Incorporating/Deploying SIEM for Forensics Evidence Collection in Cloud Environment
Muhammad Irfan, Haider Abbas, Waseem Iqbal

8:30-10:10 Session 5B Biometrics and Security Room B

Security measures for Web ETL processes
Salma Dammak, Faiza Ghozzi Jedidi, Faiez Gargour

A Review of Multimodal Biometric Systems: Fusion Methods and Its Applications
Mehdi Ghayoumi

An Adaptive Fuzzy Multimodal Biometric System for Identification and Verification
Mehdi Ghayoumi, Kambiz Ghazinour

Comparative Analysis on the Signature Algorithms to Validate AS Paths in BGPsec
Kyoungha Kim, Yanggon Kim

8:30-10:10 Session 5C Software and Modeling Room C

Depth-First Heuristic Search for Software Model Checking
Jun Maeoka, Yoshinori Tanabe, Fuyuki Ishikawa

Using SPIN to Check Simulink Stateflow Models
Chikatoshi Yamada, D. Michael Miller

A Method for Secure RESTful Web Service
Sungchul Lee, Ju-Yeon Jo, Yoohwan Kim

An Autonomous Model to Enforce Security Policies Based on User’s Behavior
Kambiz Ghazinour, Mehdi Ghayoumi

10:20-12:00 Session 6A IoT and Mobile Systems Room A

An Energy-saving Task Scheduler for Mobile Devices
Hao Qian, Daniel Andresen

Energy-Efficient Distributed Computing Solutions for Internet of Things with ZigBee Devices
Grzegorz Chmaj, Henry Selvaraj

Regimdroid: Framework for Customize Android Platform to act as a Brain for Telepresence Robot
Nouha Ghribi, Boudour Ammar, Adel M. Alimi

Challenges and Implementation of Ad-hoc Water Gauge System for the Grasp of Internal Water Damage
Takanobu Otsuka, Yoshitaka Torii, Takayuki Ito
10:20-12:00  Session 6B  Frontier of Network and Mining  Room B

Multivariate Temporal Link Prediction in Evolving Social Networks
Alper Özcan, Şule Gunduz Oguducu

A Graph Model Based Author Attribution Technique for Single-Class Email Classification
Novino Nirmal A., Tae-Sun Chung, Kyung-Ah Sohn

Enhancing the Impact of Science Data: Toward Data Discovery and Reuse
Alan Chappell, Jesse Weaver, Sumit Purohit, William Smith, Karen Schuchardt, Patrick West, Benno Lee, Peter Fox

Introducing the Concept of "Always-Welcome" Recommendations
Edson Benedito Santos Junior, Rafael D'Addio, Arthur Fortes Da Costa, Marcelo Manzato, Rudinei Goularte

10:20-12:00  Session 6C  Software Development  Room C

SAF: States Aware Fully Associative FTL for Multitasking Environment
Tae-Sun Chung, Usman Anwar, Se Jin Kwon

Robustness Testing of the Non-interference Property in Component-based Distributed Systems
Maha Naceur, Lilia Sfaxi

Objective Framework for Early-Stage Comparison of Software Development Project Types
Donghwoon Kwon, Robert Hammell

13:00-15:05  Session 7A  Data Mining and Application  Room A

A Pruning Algorithm for Reverse Nearest Neighbors in Directed Road Networks
Rizwan Qamar, Muhammad Attique, Tae-Sun Chung

Tolerance to Complexity: Measuring Capacity of Development Teams to Handle Source Code Complexity
Marcos Alvares Barbosa Junior, Fernando Buarque de Lima Neto, Tshilidzi Marwala

CORE: Continuous Monitoring of Reverse k Nearest Neighbors on Moving Objects in Road Networks
Tae-Sun Chung, Kyung-Ah Sohn, A Novino Nirmal

Mining Information Assurance Data with a Hybrid Intelligence/Multi-agent System
Charles Fowler, Robert Hammell

Using Ant's Colony Algorithm for Improved Segmentation for Number Plate Recognition
Sanchay Dewan, Shantanu Prakash, Shreyansh Bajaj
Multi-purpose Adaptable Business Tier Components Based on Call Level Interfaces
*Óscar Mortágua Pereira, Rui L. Aguiar*

Architecture for Intelligent Transportation System based in a General Traffic Ontology
*Susel Fernandez, Takayuki Ito, Rafik Hadfi*

Evaluating a GA-based Approach to Dynamic Query Approximation on an Inference-enabled SPARQL Endpoint
*Naoki Fukuta, Yuji Yamagata*

A Semantic Approach for Transforming XML Data to RDF triples
*Mohamed Kharrat, Anis Jedidi, Faiez Gargouri*

SQUED: A Novel Crowd-sourced System for Detection and Localization of Unexpected Events from Smartphone-Sensor Data
*Taishi Yamamoto, Kenta Oku, Hung-Hsuan Huang, Kyoji Kawagoe*

Decomposition of Partly Occluded Objects Based on Evaluation of Figural Goodness
*Takahiro Hayashi, Tatsuya Ooi, Motoki Sasaki*

Web-based Motion Detection System for Health Care
*Ruiling Gao, Minghuan Zhao, Zhihui Qiu, Yingzhou Yu, C. Hwa Chang*

Mobile Phone Spam Image Detection based on Graph Partitioning with Pyramid Histogram of Visual Words Image Descriptor
*So Yeon Kim, Kyung-Ah Sohn*

In-house Alert Sounds Detection and Direction of Arrival Estimation to Assist People with Hearing Difficulties
*Mohammad Daoud, Mahmoud Al-Ashi, Fares Abawi, Ala Khalifeh*

A Personalized Music Discovery Service based on Data Mining
*Md Mahfuzur Rahman Siddiquee, Md. Saifur Rahman, Naimul Haider, Shahnewaz Ul Islam Chowdhury, Mohammad Rashedur Rahman, Sharnendu Banik*
Special Session 1

Special Session on Development of Software System and its Applications

8:30-12:00  Tuesday, June 30, 2015  RoomA

Robust Location Tracking Method for Mixed Reality Robots using a Rotation
Masahiro Yamamoto, Kazuhiro Suzuki, Ryosuke Ogawa, Nobuhiro Ito, Yoshinobu Kawabe

Verifying Ignition Timing of Gasoline Direct Injection Engine's PCM
Masato Yamauchi, Nobuhiro Ito, Yoshinobu Kawabe

Analysis of Driving Behaviors based on GMM by using Driving Simulator with Navigation Plugin
Naoto Mukai

(Coffee Break)

Classification on Nonlinear Mapping of Reducts Based on Nearest Neighbor Relation
Naohiro Ishii, Ippei Torii, Naoto Mukai, Kazunori Iwata, Toyoshiro Nakashima

Analyzing Relationship between the Number of Errors in Review Processes for Embedded Software Development Projects
Toyoshiro Nakashima, Kazunori Iwata, Yoshiyuki Anan, Naohiro Ishii

Bin-Based Estimation of the Amount of Effort for Embedded Software Development Projects with Support Vector Machines
Kazunori Iwata, Elad Liebman, Peter Stone, Toyoshiro Nakashima, Yoshiyuki Anan, Naohiro Ishii

Workshop 1

International Workshop on Information Design and Media Technology (IDMT2015)

8:30-12:00 Tuesday, June 30, 2015  RoomB

(to be announced)

SERA2015 session

8:30-12:00 Tuesday, June 30, 2015(with Workshop 1)  RoomB

An Improved Multi-SOM Algorithm for Determining the Optimal Number of Clusters
Imèn Khanchouch, Malika Charrad, Mohamed Limam  (Video Presentation)

Instruction level Loop De-optimization - Loop Rerolling and Software De-pipelining
Erh-Wen Hu, Bogong Su, Jian Wang

Ensemble Feature Selection of microRNAs and Human Cancer Classification
Mingbao Piao, Hyoong Woon Song, Keun Ho Ryu
Workshop 3
The 6th International Workshop on Intelligent Computational Science (ICS2015)

8:30-12:00 Tuesday, June 30, 2015
Room C
Workshop 3 (I): Session chair: Dr. Simon Xu

Singing Voice Detection of Popular Music Using Beat Tracking and SVM Classification
*Wu Fengyan*

Link Prediction Using Matrix Factorization with Bagging
*Wu Zhifeng*

Solving the Supermarket Shopping Route Planning Problem Based on Genetic Algorithm
*Chen Xiaojia*

Online Advertising Demand-side Platform Business System Design Exploration
*Lei Tao*

A Feature Selection Algorithm of Music Genre Classification Based on ReliefF and SFS
*Wu Meimei*

Research and Implementation of Four-prime RSA Digital Signature Algorithm
*Xiao Zhenjiu*

The Maximal Operator Classifier
*Wang Yuqi*

13:00-15:05 Tuesday, June 30, 2015
Room C

The Design and Implementation of Personalized News Recommendation System
*Han Xuejiao*

A Logic Model of Interest in Information Network
*Zhou Shiping*

Research on Public Opinion Based on Big Data
*Shang Songtao*

An Automatic Semantic Web Service Composition Method Based on Ontology
*Li Ying*

Visualization in Media Big Data Analysis
*Qi Yingjian*

15:30-17:35 Tuesday, June 30, 2015
Room C
Workshop 3 (III): Session chair: Dr. Simon Xu

Personalized two party key exchange protocol
*Yi Tong*
Personalized News Recommendation Based on Links of Web  
Li Zhenzhong

Interactive Virtual Theater Display System  
Feng Min

An Improved Algorithm for Active Contour Extraction Based on Greedy Snake  
Ren Hui

Spread Influence Algorithm Of News Website Based on PageRank  
Chen Guowei

Keynote Address

MOOCs, MOOE and MOOR In China

Wenai Song, Ph.D.

Dean and Professor  
School of Software  
North University of China, Taiyuan, China

Biography

Dr. Wenai Song is Dean and Professor of the school of Software at North University of China, China. She received her Ph.D. in Mechanical and Electronic Engineering from Beijing Institute of Technology. She worked as a postdoctoral academic researcher in Material Engineering at Tsinghua University between 2006 and 2009, and was a Visiting Scholar in Tufts University, U.S.A. Her current research interest areas include Software Engineering, Cloud computing, Big data, and Smart Software City.

Dr. Song has served as the program chair for several international conferences including the IEEE/ACIS ICIS 2014.