2014 International Conference on IT Convergence and Security

List of Papers

Message from the General Chair

ICITCS Organizing Committee

ICITCS Program Committee

ICMWT Organizing Committee

ICMWT Program Committee

ICIMSA Organizing Committee

ICIMSA Program Committee

ICITCS2014: Track 1

Analysing different threats Levels in NGN and Ensuring its Security with Quality of Services
Muhammad Usman and Shoaib Hassan

Non-volatile Unified Memory Page Management for Improving Performance
Ashok Sharma, Sang-Jae Nam, Cheong-Ghil Kim, and Shin-Dug Kim

PLGC: Partial Linked GC for Datacenter
Sohyun Koo, Sejin Kwon, Sungsoo Kim, and Tae-Sun Chung

Design and Implementation of Display Module for Electronic Navigational Chart Data
GeunHong Park, and Daewon Park

Efficient Method for Processing Consecutive Events over Streams with a Negation Link
Young Cheul Kim, Jongik Kim, Hyung-Ju Cho, and Tae-Sun Chung

Implementation of Mobile-Phone Services in Preventing Mother-To-Child Transmission of HIV (PMTCT)
Christina Muro and Leonard J. Mselle
A Study on Implementation of IVI Applications for Connected Vehicle Using HTML5
Insick Son, Kabsu Han and Daejin Park, Meng Di Yin, and Jeonghun Cho

On-Chip Event Debugger (OCeD) with Automated Code Execution Engine for Control Flow Detection
Daejin Park, Meng Di Yin, and Jeonghun Cho

Information Sharing in Governance of Flood Management in Malaysia: COBIT based framework
Siti Sarah Maidin, Marini Othman, Mohammad and Nazir Ahmad

Runtime Updatable and Dynamic Event Processing using Embedded ECMAScript Engines
Amir Azodi, David Jaeger, Feng Cheng, and Christoph Meinel

Smart Recycle Bin: A Conceptual Approach of Smart Waste Management with Integrated Web based System
Mohd Helmy Abd Wahab, Aeslina Abdul Kadir, Mohd Razali Tomari, and Mohamad Hairol Jabbar

ICITCS2014: Track 2

Study of packet level UDP performance of NAT44, NAT64 and IPv6 using iperf in the context of IPv6 migration
Vitruvius John D. Barayuga and William Emmanuel S. Yu

Abused Android Permissions by Advertising Networks
Murat Oğul, Selçuk Baktır, and Emin İslam Tatlı

Analysis of Spectrum Sensing based on Energy detection method in Cognitive Radio Networks
N. Swetha, Panyam Narahari Sastry, and Y. Rajasree Rao

Rozanawati Darman and Norafida Ithnin

Authentication Techniques for Improving the Reliability of the Nodes in the MANET
Hwan-Seok Yang, and Seung-Jae Yoo

ICITCS2014: Track 3

A systematic redundancy approach in watermarking using Sudoku
Shamsul Kamal Ahmad Khalid, Mustafa Mat Deris, and Kamaruddin Malik Mohamad

A Code based Fruit Recognition Method Via Image Conversion Using Multiple Features
Jang-yoon Kim, Michael Vogl, and Shin-Dug Kim
An adaptive LOD setting methodology with OpenGL ES library on mobile devices
Jin-Chun Piao, Chang-Woo Cho, Cheong-Ghil Kim, Bernd Burgstaller, and Shin-Dug Kim

Improved QEM simplification algorithm based on discrete curvature and a sparseness coefficient
Yungang Wei, Lei Wu, Bo Sun, and Xiaoming Zhu

Real-time Visualization of Disaster Behavior
Jhoanna T. Isla, and Maria Regina E. Estuar

A Height-map Based Terrain Rendering with Tessellation Hardware
Goanghun Kim, and Nakhoon Baek

Developing an Audio-based Game
Byoung Uk Im, and Nakhoon Baek

ICITCS2014: Track 4

Web Based Enterprise Business Intelligence Maturity (EBI2M) assessment tool
Min-Hooi Chuah, and Kee-Luen Wong

A Community Divisive Algorithm using Local Weak Links
Li Lin, Lu Songnian, Li Shenghong, and Xia Zhengmin,Yuan Yi

An Evaluation of Feature Selection Technique for Dendrite Cell Algorithm
Mohamad Farhan Mohamad Mohsin, Abdul Razak Hamdan, and Azuraliza Abu Bakar

Telugu Handwritten Character Recognition using Zoning Features

An SMO Approach to Fast SVM for Classification of Large Scale Data
Juanxi Lin, Mengnan Song, and Jinglu Hu

Pruning Algorithm for Multi-Objective Optimization with Decision Maker's Preferences of System Redundancy Allocation Problem
Tipwimol Sooktip and Naruemon Wattanapongsakorn

A Preference-based Multi-objective Evolutionary Algorithm for Redundancy Allocation Problem
Sufian Sudeng and Naruemon Wattanapongsakorn

Network-based Visualization of Opinion Mining and Sentiment Analysis on Twitter
Alemu Molla, Yenewondim Biadgie and Kyung-Ah Sohn
Massive Open Online Course (MOOC) with Learning Objects and Intelligent Agent Technologies
Ong Sing Goh, Mohd Khanapi Abd. Ghani, Yogan Jaya Kumar, Yun-Huoy Choo, and Azah Kamilah Muda

Correlation Analysis between Idiopathic Scoliosis and Pelvic Asymmetry using Sitting Posture Measurement System
Ji-Yong Jung, Chan-Il Yoo, Kyung-Ah Kim, Soo-Kyung Bok, Bong-Ok Kim, Yonggwan Won, and Jung-Ja Kim

Evaluation of Sitting Balance in Adolescent Idiopathic Scoliosis Patients with Pelvic Rotation using Balance Board System with Accelerometer
Ji-Yong Jung, Chan-Il Yoo, Kyung-Ah Kim, Soo-Kyung Bok, Bong-Ok Kim, Yonggwan Won, and Jung-Ja Kim

Evaluation of Custom-made Insoles on Pes Cavus during Walking
Jung-Kyu Choi, Chan-Il Yoo, Kyung-Ah Kim, Yonggwan Won, and Jung-Ja Kim

Study on Datamining Technique for Foot Disease Prediction
Jung-Kyu Choi, Chan-Il Yoo, Kyung-Ah Kim, Yonggwan Won, and Jung-Ja Kim

ICITCS2014: Track 5

An Approach to Detecting Software Process Deviations
Zhu Rui, Li Tong, Dai Fei, Mo Qi, Lin Leilei, He Yun, and Chen Yeting

Research and Implementation of an IMS-based AS/MRFC Model for IVR Services
Youzheng Chen, Baozhong Cheng, and Xiaoyan Zhang

The Five Factors influencing Software Architecture Modeling and Evaluation Techniques
Hassan Almari and Clive Boughton

ICITCS2014: Track 7

Ensuring Data Security by AES for Global Software Development in Cloud Computing
Muhammad Usman and Usman Akram

Dynamic Encryption Key Design and Its Security Evaluation for Memory Data Protection in Embedded Systems
Tao Liu and Hui Guo

A Whitebox Cryptography application for Mobile device security against whitebox attacks
Jong-Yeon Park, Jung-Nyeo Kim, Jae-Dock Lim, and Dong-Guk Han
Web login Vulnerability Analysis and Countermeasures  
Seung-Jae Yoo and Jeong-Mo Yang

Application of Advanced Encryption Standard to Chaotic Synchronization Systems: Using an Improved Genetic Algorithm as Auxiliary  
Feng-Hsiag Hsiao and Guang-Wei Liou

On the Approach of Static Feature Extraction in Trojans to Combat against Zero-day Threats  
Azhar Javed and Monis Akhlaq

ICITCS2014: Track 8

Study on Analysis of Security Vulnerabilities and Countermeasures in ISO/IEC 15118 based Electric Vehicle Charging Technology  
Seokcheol Lee, Yongmin Park, Hyunwoo Lim, and Taeshik Shon

Applying Digital Forensics in Various Application Fields : Required Elements for Having Legal Force  
Yongmin Park, Seokjun Lee, Jongwan Kim, and Taeshik Shon

Scenario-based Attack Route on Industrial Control System  
SungMoon Kwon, HyungUk Yoo, Taeshik Shon, and GunWoong Lee

Defense Methodologies of AV Evasion for access control and information assurance in Industrial Distributed control systems and SCADA systems  
P. Sai Krishna and Arshad Shaik

ICITCS2014: Track 9

Emergent Challenges and IPDS for Anti-Phishing Attack  
Li Bing, Sun Ruifeng, Fang Xin, Luo Xue, and Chang Wei-hao

Improved Authentication Scheme of Binding Update Protocol in Mobile IPv6 Networks  
Dong Chun Lee and Kuinam J. Kim

A user centric identity management for Internet of things  
Do van Thuan, Pranas Butkus and Do van Thanh

Line-of-Sight Based Beamforming for Security Enhancements in Wiretap Channels  
Shihao Yan and Robert Malaney

Attacks about Channel Bonding on WLAN  
Chung Do-Young, Lee Sok-Joon and Kim Sin-Hyo
ICITCS2014: Track 10

Privacy Preserving Smart Grid Management in the Cloud
Selçuk Baktir

A Study on Secure Element for Smartwork
Hwan-Seok Yang and Seung-Jae Yoo

Secure Microcontroller with On-Chip Hierarchical Code
Validator for Firmware Authentication
Daejin Park, Meng Di Yin, and Jeonghun Cho

Dynamic Security Level Changing Strategy using Attack Predictions-Case Study of TCP SYN Attacks
Sung-Hwa Lim and Jai-Hoon Kim

ICMWT2014: Track 1

Multi-objective Optimization Techniques for VLSI Placements
Yasutaka Matsuoka and Hua-An Zhao

Rapid Application Development of eBayanihan Patroller: A Crowdsourcing SMS Service and Web Visualization Disaster Reporting System
Marlene M. De Leon and Ma. Regina E. Estuar

A Magnetic Resonant Coupling Wireless Power Transmission System under Different Load Conditions
Hanqiu Mo and Yasuaki Inque

An Interference Avoidance System using Energy Contour Line for Coexistence with IEEE 802.11 Networks in Wireless Sensor Networks
Jin-Woo Kim, Jin Gwan Park, Min A Jeong, and Seong Ro Lee

Building UWB based Smart Home Network for Wireless IPTV
Seong Ro Lee, Beom-mu Kim, Min A Jeong, and Jin-Woo Kim

The Design of Two Versions of 3D Mouse
Jiayang Sun, Cheng Feng, Donglin Wang and, Meng Gu

ICMWT2014: Track 2

Validating UI through UX in the Context of a Mobile - Web Crowdsourcing Disaster Management Application
Maria Regina Estuar, Marlene de Leon, Ma. Dianne Santos, John Owen Ilagan, and Barbara Anne May
ICMWT2014: Track 3

Barriers To Community-Based Computing in the Philippines
John Owen F. Ilagan and Ma. Regina E. Estuar

Intuitive gestural interfaces / adaptive environments and mobile devices / apps. Playing music and the musical work as a role model for personalized gestural interaction in social environments.
Werner Jauk

Profiling Flood Risk through Crowdsourced Flood Level Reports
John Noel C. Victorino and Ma. Regina Justina E. Estuar

A GPS Information Sharing System Based on Bluetooth Technology
Chao Liu, Changkai Zhang, Hong Yao, Deze Zeng, Qingzhong Liang, and Chengyu Hu

GTS ALLOCATION STRATEGY FOR IEEE 802.15.4 WSN
Satish K. Shah, Sonal J. Rane and Dharmistha D. Vishwakarma

ICIMSA2014

Heuristics for the Vendor-Managed Inventory Problem of Convenience Stores
Sung-Joon Yoon and Yang-Byung Park

An Enhanced TAC/AA Competition Model Designed for Sponsored Search Market
Li Bing, Sun Ruifeng, Fang Xin, Luo Xue and Chang Wei-hao

A Study on Privacy Protection Tasks for Cross-border Data Transfers
Young-Jin Shin

Simulations of continental logistics center from the perspective of Technologist
Juraj Camaj, Jana Lalinska and Jaroslav Masek

Environmental Efficiency Evaluation with Undesirable Outputs-A study on China’s iron and steel industry
Feng He, Liyun Zhu, Wei Jiang

data perturbations for all DMUs in DEA with interval uncertainty
Feng He, Xiaoning Xu and Liyun Zhu
Status Trend Evaluation Research on Development of Low Carbon Economy in Coal Enterprises
Dongdong Ma and Feng He

An Agile Framework for Diagnosing Problem Areas for Family Businesses
Kerstin Siakas and Elli Georgiadou

Pricing decisions of the bank in supply chain financing with accounts receivable

Voting Models for Summary Extraction from Text Documents
Yogan Jaya Kumar, Ong Sing Goh, Mohd Khanapi Abd. Ghani, Naomie Salim, and Ameer Taufik Albaham

A Research on Expatriate Cross-Cultural Adjustment and Job Performance in MNCs
Kudratov Khikmatullo and Liu Cheng

A general transfer station location model in relay delivery considering carbon footprint
Qun Zhang, Lirong Wei and Rui Hu

Uncertain Portfolio Selection with Background Risk
Xiaoxia Huang and Hao Di

CFD: a visualisation framework for comparative evaluation
Elli Georgiadou, Richard Comley, Anthony White

New Solution for a Benchmark Nurse Scheduling Problem Using Integer Programming
Geetha Baskaran, Andrzej Bargiela and Rong Qu

Big Data Analysis using Apache Hadoop
Shankar Ganesh Manikandan and Siddarth Ravi

Risk Management & Assessment on Road Safety Concerns: Case of Road Rehabilitation Project
Kudratova Shamsiya, Xiaoxia Huang and Khikmatullo Kudratov

Choosing how tight to bond: The interplay between corporate combinations, alliances and networks
Mait Rungi and Valeria Stulova

Effect of Knowledge Management based Error Mitigation Techniques in Medical and Diagnostic Applications
Maysoon S. Al Dekhail
IWICT (Workshop)

SLAN-based Next Generation User-Customized Dynamic Interface Sharing for Smart Mobile Devices
Sanghyun Park, Jiseung Nam and Jinsul Kim

Impact of Clock Frequency and Number of Cores on GPU Performance
Hong Jun Choi, Dong Oh Son, Cheol Hong Kim and Jong Myon Kim

A Novel Prefetch Technique for High Performance Embedded System
Hong Jun Choi, Dong Oh Son, Cheol Hong Kim and Jong Myon Kim

Analysis on the Power Efficiency of Mobile Systems Varying Device Parameters
Hong Jun Choi, Dong Oh Son, Cheol Hong Kim and Jong Myon Kim

Foreground Extraction in Video based on Edge-based Robust Principal Component Analysis
Thuong-Khanh Tran, Ngoc-Nam Bui, Jin-Young Kim

Human detection and tracking using poselet with weighted motion block Particle Filters
Ngoc-Nam Bui, Thuong-Khanh Tran, Chenlin Hu, Jin-Young Kim and Hyoung-Gook Kim

Human Detection in Video using Poselet combine with Gradient Local Auto Correlation Classifier
Thuong-Khanh Tran, Ngoc-Nam Bui, and Jin-Young Kim

QoE Oriented Analysis for Video Quality Assessment
Yogiraj S. Jadhav, Baeho Lee, and Jinsul Kim

Combining STUN Protocol and UDP Hole Punching Technique for Peer-to-Peer Communication across Network Address Translation
Tran Thi Thu Ha, Jaehyung Park, Yonggwan Won, and Jinsul Kim

Enhanced Face Recognition by Fusion of Global and Local Features Under Varying Illumination
Tan Dat Trinh, Jin Young Kim, and Seung You Na

White Matter Hyperintensities Extraction Based T2-FLAIR MRI Using Non-Local Means Filter and Nearest Neighbor Algorithm
Trin Thi Thu Hah, Jin Young Kim, Seung Ho Choi

Classification of Human Postures Using Ultra-Wide Band Radar Based on Neural Networks
Mohammad Ahangar Kiasari, Seung You Na, and Jin Young Kim

User Position Estimation and Visualization Using Power Consumption of Home Appliances
Dongwook Lee, Minsoo Hahn, Sangjun Park, and Seunghyung Lee
Web based Visualization for Sports Data Pattern
Dongwook Lee, Minsoo Hahn, Sangjun Park, and Seunghyung Lee

Virtual Environment based Graphical User Interface for Authoring and Visualization System
Dongwook Lee, Minsoo Hahn, Sangjun Park, and Seunghyung Lee

Implementation of a Reading Assistive Computer System using Image Processing Techniques
Se-Yeol Yang and Jung-Ja Kim

Performance Comparison of Multilayer Neural Networks for Sleep Snoring Detection
Tan Loc Nguyen and Yonggwan Won

IWSATA (Workshop)

A Case Study of Visual Analytic Method on Behavior Modification by Movement Therapy
Jaeho Lee, Inkyung Byun, and Kyoungro Yoon

Transportation Methods of Sensory Information using multimedia packet
Jaeho Lee and Kyoungro Yoon

Brain Segmentation using Susceptibility Weighted Imaging Method
Sung-Jong Eun and Taeg-Keun Whangbo

A Multi-core Architectural Pattern Selection Method for the Transition from Single-core to Multi-core Architecture
Soojin Park and Young B. Park

Bad Symptoms for Usability of Mobile Applications
Soojin Park, Jeongwon Byeon, Mansoo Whang, Young B. Park

An object pool realization of Whitelist strategies to neutralize Injection flaws
Seokmo Kim and Young B. Park

JPEG-AR Standard Enabling Augmented Marketing
Min-Uk Kim and Kyoungro Yoon

Analysis of Effect of Luminance Space on Face Detection
Hyuk-Kyu Lim, Je-Ho Park, and Han Auk Kim

Rotation Invariant Detection Using Image Identifier
Takaaki Ishikawa and Je-Ho Park
Entropy based Image Identifier Generation
Je-Ho Park and Changwon Kang

A SIFT-Color Moments Descriptor For Object Recognition
Lu Bo and TaegKeun Whangbo

An Efficient Moving Detection Methodology in Mobile Cloud Environment
Changhee Cho, Sanghyun Park, Jinsul Kim and Sang-Joon Lee

A Study on Audio Levels and Loudness Standard for Digital Broadcasting Program
Sang Woon Lee, Bongjin Baek, and Cheong Ghil Kim

A Study of High Efficiency Video Coding File Format
Apiradee Ampawasiri, Chompoo Suppatoomsin, Bongjin Baek, Joonho Ryu, SangWoon Lee, and Cheong Ghil Kim

IWCWI (Workshop)

Cluster Business Model for Wellness IT
Seungae Kang and Youngjoo Kim

Fitness image model for Individual with Disabled
Seungae Kang, Sunyoung Kang, and Hyuncheol Kim

IT Technology and Exercise Rehabilitation
Byungyeon Park, Wonhyuk Lee, and Hyuncheol Kim

Virtual Reality Exercise Simulator
Soojung Park and Bongsup Park

Network stability based on node weight
Seunghae Kim, Wonhyuk Lee, and Hyuncheol Kim

Micro-Datacenter Management Architecture for Mobile Wellness Information
Wonhyuk Lee, Seunghae Kim, Tae Yeon Kim, and Hyuncheol Kim