# Table of Contents

Preface v  
Organizing Committees vii  

## ICICA 2012 Session 1

The Effects of Ubiquitous Games on Junior Students’ Achievement in English Learning  
*Tsung-Yu Liu, Tan-Hsu Tan, Min-Sheng Lin and Yu-Ling Chu*

Automatic Segmentation of Pallet Images Using Color Statistics and Mixture Color Space  
*Ssu-Wei Chen, Luke K. Wang and Jen-Hong Lan*

An Analysis of Required Information Technology Competence for MIS Students in Taiwan’s Universities  
*Yi-shun Wang and Tzung-I Tang*

A Model for Evaluating E-Learning Blog Success  
*Yi-shun Wang and Tzung-I Tang*

High Performance Architecture for LMS Based Adaptive Filter Using Distributed Arithmetic  
*Surya Prakash M and Rafi Ahmed Shaik*

A Review of Virtuality and Collaborative Networks  
*Albert H. S. Scott*

A Modular Approach to VGA Monitor Controller for BZK.SAU.FPGA10.1 Microcomputer Architecture Design  
*Halit Oztekin, Feyzullah Temurtas and Ali Gulbag*

Web based C-language E-Learning System with Controllable Fouraxis Robot Arm  
*Yu-Feng Tsai, Yi-Juo Wen, Guan-Hua Shen and Ming-Chung Tang*

Location-Aware Dynamic Resource Allocation Model for Cloud Computing Environment  
*Gihun Jung and Kwang Mong Sim*

Learning Diagnosis for Students’ Free-text Answers with Feature-based Approaches  
*Wen-Juan Hou, Chieh-Shiang Lu, Chuang-Ping Chang and Hsiao-Yuan Chen*

## ICICA 2012 Session 2

Controlling Web Services Access through a Trust based System  
*Rohit Dhand and G. Geetha*

Mobile Software Application for Water Consumption Awareness (Sawacae)  
*Adel Khelifi, Mohammed Ghazal, Hussain Mohammad Albloushi and Mohamed Toubar*

Prediction of Customer Purchase Probability for Online Recommendation Systems  
*Song-Yi Han and Jong Woo Kim*

Personalized Recommendation Based on Collaborative Filtering with Social Network Analysis  
*Joong Hee Jeong and Jong Woo Kim*

Comparison of Cloud Service Quality Information Publication Based on Cloud Service Quality Model  
*Jong Woo Kim and Jung-Hee Jeong*

Implementation of Vehicle Control System Based on IPV6-CAN Gateway  
*Jiaqiao Liu1, Guihe Qin and Kunlun Duan*

A Novel Framework to Model a Secure Information System (IS)  
*84*
Providing an Interactive Approach to Solve Tower of Hanoi Problem Using Open Graphics Library

Deepankar Singh and Anitha Premkumar

Relationship between Market Share and Buzz Share on Movie Ticket Reservation

Jung Soo Kim and Jong Woo Kim

An Adaptive Tabu search Method for Optimizing Procurement Plans under Correlated Demands

Xingwen Zhang

ICICA 2012 Session 3

R&D Multi-Project Optimization Problem

Xingwen Zhang

Cooperative Data Deployment Strategy in Wide Area Surveillance Networks

Soomi Yang and Pil Seong Park

The Selection of Agile Development’s Effort Estimation Factors based on Principal Component Analysis

Bo Cheng and Xuejun Yu

Technique of Tangible User Interfaces for Smartphone

Jinsuk Kang

The Proposal of Support Software System for Smart Home

Peter Hamernik, Dusan Mudroncik and Pavol Tanuska

The Research of Electronic Payment Platform Based on Public Key Infrastructure

Jingsong Tian, Xiaojin Wu and Rong Hu

Implementation of Bioinformatics in UAE Higher Education Institutions

Samia loucif and Murad Al-rajab

Feasibility Analysis of Improving the Accessibility and Security of Nano-Labs via Kinect

Pan Wen-Fu, Chien Mei-Ying, Liu Chih-Chen and Chan Kuei-Hui

A Locality Enhanced Scheduling Method for Multiple MapReduce Jobs In a Workflow Application

Dongjin Yoo and Kwang Mong Sim

A Video Watermarking Scheme Based on 2d DWT and Pseudo 3D DCT

De Li, Yingying ji and JongWeon Kim

ICICA 2012 Session 4

A Multiple Audio Watermarking Algorithm Using 2D Code and Hadamard Transform

Jihah Nah, Jizhe Cui and Jongweon Kim

Implementation of Unitary Music Algorithm Using Xilinx System Generator

Merwan Lounici

A Study of 3D Stereoscopic Map-Tool Using Ogre3D Game Engine

Sang Hyun Kim, Jeong Yeop Kim and Se Jung Kim

Privacy-Preserving Periodical Publishing for Medical Information

Hua Jin, Shi-guang Ju and Shan-cheng Liu

A New Queuing System with Different Classes of Customers

Youseef Alotaibi

Perception of Depth in Stereoscopic Image with the Change of Saturation

Jeong-Yeop Kim and Sang-Hyun Kim

Error Decision Rules to Detect Misspelled Predicate

Gil-Ja So and Hyuk-Chul Kwon

Performance Analysis of Fingerprint Identification Using Different Levels of DTCWT

Jossy P. George, Abhilashs. K., Chethana M. D. and Raja K. B.
Automatic Document Archiving for Cloud Storage Using Text Mining-Based Topic Identification Technique
Keedong Yoo

A New Algorithm for Pedestrian Detection
Cheng Ke-yang, Bao Jun-xian

ICICA 2012 Session 5

Candidate Password Analysis of User-Interactive Password Schemes
Sung-Hwan Kim and Hwan-Gue Cho

A Comparative Analysis System for Detecting Alternative Splicing in Multiple Ngs Result Files
Sora Kim, Seokmoon Choi and Hwan-Gue Cho

Design of Intelligent Distance Education Platform Based on SOA
Xiao-yan Ai

Method of Harmonic Detection Based On the Wavelet Transform
Liang Qingyang, Sun Zhe and Zhang Chenfei

Study on Design Proposal of Computerized Numerical Control Machine Networking
Zhang lei

How Artificial Intelligent Scheduling Techniques Support Intelligent Reflective E-Portfolio
Farhang Jaryani, Mohd Ridzuan Bin Ahmad, Shamsul Sahibuddin and Jamshid Jamshidi

Dynamical Adhesion Behaviors of Single-walled Carbon Nanotubes using atomistic simulations
Pei-Hsing Huang, Jing-Tung Wen, Chih-Hung Wu, Yun-Yun Chen and Shen-Jui Chen

Implementation of QR-decomposition based on cordic for unitary MUSIC algorithm
Merwan lounici, Xiaoming Luan and Wahab SAADi

Use Information Technology to Improve College Chinese Teaching
Zhonghua Li

A Multi-gradation Stereo Matching Method Based on Edge Feature Points
Zhulin LI

ICICA 2012 Session 6

Formal Model of Classic Operating System Kernel
ShengWen Gong

GA-Ethernet: The Global Area Ethernet
Suthee Sirisathidecha and Komwut Wipusitwarakun

A Development of 2D Cartoon Animation to Safe Driving Promotion A case study
Mahasarakham University
Patcharin Pratumchat and Suwich Tirakoat

Classification Techniques of Datamining to Identify Class of the Text with Fuzzy Logic
Renuka D. Suryawanshi and PROF. D. M. Thakore

E-Learning Pedagogy in Interactive English Classroom
Hou Rui and Ruan Hongmei

An Investigation of Contact Forces using a Kinaesthetic Feedback
Abdouslam M. Bashir and Robert Bicker

Analysis on Landscape Pattern and Dynamic Variations of Linghe Estuarine Wetland
Qian Cheng, Yu-long Zhang and Lin-Fei Zhou

An Approach for QoE management in WSAN
Saeid Pashazadeh

Modeling a Concurrency Control Mechanism in Distributed Databases using Hierarchical Colored Petri Net
Saeid Pashazadeh
Evaluations of Data Mining Methods in Order to Provide the Optimum Method for Customer Churn Prediction: Case Study Insurance Industry
Reza Allahyari Soeini and Keyvan Vahidy Rodpysh

ICICA 2012 Session 7

Reward Based Process - Service Composition Model Using State Link Matrix
Baskaran Alagappan, Dr.T.Ravi, Danish Kumar and Nithyanandam

The Research and Realization of Application Updating Online
Jiang Du, Ti Kang and Yun Yang

Smart City——A New Mentality for Resource-based Cities’ Sustainable Development
Fu Bang and Zhou Chenyu

A Research on Real-Time Hand-Detection Technology Oriented to the Somatic Games
Ren chen and Hui Li

The Usage of Performance Testing for Information Systems
Pavol Tanuska, Ondrej Vlkovic and Lukas Spendla

Staff Line Detection and Revision Algorithm Based On Subsection Projection and Correlation Algorithm
Yang Yin-xian and Yang Ding-li

A Simple Multi-Models Rendering Framework--PM-OCMMRF
Feng Qin, Luo Jian-Xin, Ni Gui-Qiang, Wang Bai, Jiang Jin-Song and Deng Zhan-Tao

Author Index