2013 International Conference on Informatics and Creative Multimedia

(ICICM 2013)

Kuala Lumpur, Malaysia
4-6 September 2013

IEEE

IEEE Catalog Number: CFP1377W-POD
ISBN: 978-1-4799-3702-8

2013 International Conference on Informatics and Creative Multimedia

ICICM 2013

Table of Contents

Message from ICICM'13 Chairs.....xi

Message from ICICM'13 Editorial Committee.....xii

Organizing Committee.....xiii

Reviewers.....xv

Parallel Session 1

A Comparison Enterprise Architecture Implementation Methodologies 1
Babak Darvish Rouhani, Mohd Naz'ri Mahrin, Fatemeh Nikpay, and Pourya Nikfard

A Conceptual Model of Interactive Persuasive Learning System for Elderly to Encourage Computer-Based Learning Process 7
Abdul Nasir Zulkifli, Nurtihah Mohamed Noor, Juliana Aida Abu Bakar, Ruzinoor Che Mat, and Mazida Ahmad

User Experience for Digitization and Preservation of Cultural Heritage 13
Zaihasriah Zahidi, Yan Peng Lim, and Peter Charles Woods

Exploring the Use of Internet Media for Healthcare and Cancer Awareness 17
Ang Kok Yew, Koo Ah Choo, and Tengku Putri Norishah

A Novel Approach to Enhance Robustness in Digital Image Watermarking Using Multiple Bit-Planes of Intermediate Significant Bits 22
Ali Sharifara, Mohd Shafry Mohd Rahim, and Morteza Bashardoost

Teaching Elements and Principles of Design through One Minute Animation to Fundamental Design Students 28
Elyna Amir Sharji, Rose Linda Zainal Abidin, and Hanafiah Waiman

A Model to Assess the Usability of Enterprise Architecture Frameworks 33
Amir Bijarchian and Rosmah Ali

A Review of Critical Success Factors of Enterprise Architecture Implementation 38
Fatemeh Nikpay, Harihodin Selamat, Babak Darvish Rouhani, and Pourya Nikfard

YouTube Videos for Learning Principles of Animation 43
Yuen May Chan, Koo Ah Choo, and Peter C. Woods

Teaching Creativity in Design Aesthetics: An Introspective Account of a University Lecturer 47
Tan Wee Hoe

A Taxonomy of SQL Injection Detection and Prevention Techniques 53
Amirmohammad Sadeghian, Mazdak Zamani, and Azizah Abd. Manaf

Authentic Learning Strategies to Engage Student's Creative and Critical Thinking 57
Heidi Tan Yeen-Ju, Neo Mai, Neo Tse Kian, Kwok Wai Jing, Lee Kai Wen, and Lai Chen Haw

An Empirical Analysis of a Testability Model 63
Pourya Nikfard, Maryam Khanian Najafabadi, Babak Darvish Rouhani, Fatemeh Nikpay, and Harihodin Bin Selamat

Cypris Chat: Emergent Design for Language Education in Second Life 70
Jean-Paul Duquette

Application of Madeline Hunter Model in Mathematics Learning Courseware 76
Ong Boon Han, Noor Dayana Abd Halim, Zaleha Abdullah, and Rio Surmani Shariffuddin

Performance Analysis in Reactive Routing Protocols in Wireless Mobile Ad Hoc Networks Using DSR, AODV and AOMDV 81
Tanya Koohpayeh Araghi, Mazdak Zamani, and Azizah BT Abdul Mnaf

Parallel Session 2

An Empirical Study into Model Testability 85
Pourya Nikfard, Maryam Khanian Najafabadi, Babak Darvish Rouhani, Fatemeh Nikpay, and Harihodin Bin Selamat

Designing Opportunities to Learn through Online Active Learning Environment 93
Kwok Wai Jing, Neo Tse Kian, Neo Mai, Heidi Tan Yeen-Ju, Lai Chen Haw, and Son Yang Fook

Diffusion of iTV Advertising in Malaysia: The Industry Players' Perspectives 99
Siti Mahfuzah Sarif, Ariffin Abdul Mutalib, Sabrina Mohd Rashid, and Azizah Che Omar

Expression Driven Trigonometric Based Procedural Animation of Quadrupeds 104
Zeeshan Bhatti, Asadullah Shah, Mustafa Karabasi, and Waheed Mahesar

Anaglyph View of Kinect 3D Stream Capture 110
Mahdi Babaei, Niloufar Makhzani, Wong Chee Onn, and Lim Yan Peng

Effectiveness of Using English Vocabulary Mobile Applications on ESL's Learning Performance 114
Azadeh Rezaei, Neo Mai, and Ahmad Pesaranghader

Identification of Research Gap: T-Commerce Impulse Purchase for iTV Advertising 119
Azizah Che Omar, Norshuhada Shiratuddin, Siti Mahfuzah Sarif, Ariffin Abdul Mutalib, and Sabrina Mohd Rashid

A Secure Method against Frequency Attack for Pattern Query on Encrypted String Data 123
Rama Roshan Ravan, Norbik Bashah Idris, and Zahra Mehrabani

Cryptographic Hash Function: A High Level View 128
Abdulaziz Ali Alkandari, Imad Fakhri Al-Shaikhli, and Mohammad A. Alahmad

Interactive Kinect Using Mobile Phone for Education 135
Mahdieh Molaei Tehrani and Yan Peng Lim

Gesture Recognition and Prediction for Smart Photo Album 139
Mahdi Babaei, Wong Chee Onn, and Lim Yan Peng

Predicting User Actions in Kinect using Simple Markov Assumption 143
Fanji Ari Mukti and Wong Chee Onn

Evaluation of a Novel Bees Algorithm for Improvement of Genetic Algorithms in a Classification Model 147
Amir Jamshidnezhad and Md Jan Nordin

Online Collaborative Learning in Tertiary ICT Education: Constraints and Suggestions for Improvement 153
Mohd Nihra Haruzuan Bin Mohamad Said, Mike Forret, and Chris Eames

Gesture and Face Recognition for an Interactive Email System 159
Mahdi Babaei, Wong Chee Onn, and Lim Yan Peng

Sensorial Design for Installation Art through E-Learning 165
Mahdieh Molaei Tehrani, Kook Yoong Lim, and Mehdi Zareei

Interactive Mobile Game for Learning about Sustainablity Education 168
Cheah WaiShiang, Tay Zhen Wei, Boon Hue Kee, and Fitri Suraya Mohamad

Parallel Session 3

Implementing Computer-Aided Language Learning Tool Using Hybrid Agile Method: A Case Study 174
Mashal Alqudah and Abdallah A. Abdallah

Slideware2.0: A Prototype of Presentation System by Integrating Web2.0 and Second Screen to Promote Education Communication 181
Ruowei Xiao, Zhanwei Wu, and Kazunori Sugiura

Knowledge Management Practices and Implementation of E-Insurance 186
Shadi Ebrahimi Mehrabani and Maziar Shajari

Modelling Place Elements in Virtual Heritage Environment 191
Izham Ghani, Ahmad Rafi, and Peter Woods

Improving Gloss Vector Semantic Relatedness Measure by Integrating Pointwise Mutual Information: Optimizing Second-Order Co-occurrence Vectors Computed from Biomedical Corpus and UMLS 196
Ahmad Pesaranghader, Saravanan Muthaiyah, and Ali Pesaranghader

Using Blended Learning to Enhance Students' Cognitive Presence 202
Mohd Fadzli Ali, Gordon Joyes, and Linda Ellison

Learning and Knowledge Management: Learning as an Integrative Role for Knowledge Creation 209
Suzilawati Binti Ibrahim and Low Hock Heng

Multicollisions in Sponge Construction 215
Mohammad A. Alahmad, Imad Fakhri Alshaikhli, and Mridul Nandi

Web-Based Collaborative Learning: Students' Feedback on the Communication and Interaction Processes 220
Leow Fui Theng and Neo Mai

Mobile Learning Awareness among Students at Higher Learning Institutes: A Case Study 226
Siti Fazlina, Aisyah Abdul Manap, and Riaza Mohd Rias

Parallel Session 4

New Algorithm with Bandwidth Reduction for Smaller Size Digital Signature 230
Erfaneh Noroozi, Salwani Bt Mohd Daud, and Ali Sabouhi

Facebook Marketing Strategy for Small Business in Malaysia 236
Imran Othman, Azman Bidin, and Hanafizan Hussain

Visual Representation: Enhancing Students' Learning Engagement through Knowledge Visualization 242
Zarwina Yusoff, Siti Aminah Katmon, Mohammad Nazir Ahmad, and Siti Hidayah Mohd Miswan

A Pedagogical Re-tale: Nusantara Folktales Conservation via Multimedia Programming in Alice 2.3 248
Siti Noraisyah Abd Rahman, Nor Azlin Mazlan, and Ling Siew Woei

Security Threats in Online Social Networks 254
Amirmohammad Sadeghian, Mazdak Zamani, and Bharanidharan Shanmugam

The Concept of Digital Literacy from the Perspective of the Creative Multimedia Industry 259
Nazerin Ibrahim, Tenku Norishah Tenku Shariman, and P. Woods

SQL Injection Is Still Alive: A Study on SQL Injection Signature Evasion Techniques 265
Amirmohammad Sadeghian, Mazdak Zamani, and Suhaimi Ibrahim

A Taxonomy of SQL Injection Attacks 269
Amirmohammad Sadeghian, Mazdak Zamani, and Shahidan M. Abdullah

The Impact of New Digital Media on Graphic Designer in Jordan 274
Mahmoud Abushawali, Yan Peng Lim, and Ahmad Radzi Bedu

Taguchi-Based Parameter Designing of Genetic Algorithm for Artificial Neural Network Training 278
Najmeh Sadat Jaddi, Salwani Abdullah, and Abdul Razak Hamdan

Sustainability Modelling of e-Commerce for Rural Community: A Case from Long Lamai e-Commerce Initiative 282
WaiShiang Cheah, Azman Bujang Masli, and Edwin Mit

Young Visitors' Preferences for Touch Screen Design in Museums 288
Zhen Ling Katharine Ting, Yan Peng Lim, and Elyna Amir Sharji

Novice Programming Students' Perception of Learning Object 292
Reginamary Matthews, Hew Soon Hin, and Koo Ah Choo

Testing an Adoption Model for E-Government Services Using Structure Equation Modeling 298
Maziar Shajari and Zuraini Ismail

Parallel Session 5

Using Mayer's Design Principles in Online Learning Modules: Implementation in a Student Centered Learning Environment 304
Yap Wei Li, Neo Mai, and Neo Tse-Kian

Use of Optical Motion Capture in Sports Science: A Case Study of Golf Swing 310
Siriporn Noiumkar and Suwich Tirakoat

Enhancement and Implementation of Network Access Control Architecture for Virtualization Environments 314
Hairil Annuar, Bharanidharan Shanmugam, Azuan Ahmad, Norbik Bashah Idris, Sameer Hasan AlBakri, and Ganthan Nayarana Samy

Exploring Believable Character Animation Based on Principles of Animation and Acting 321
Nekhat Sultana, Lim Yan Peng, and Nico Meissner

Log Visualization of Intrusion and Prevention Reverse Proxy Server against Web Attacks 325
Teddy Mantoro, Normaziah binti Abdul Aziz, Nur Dalilah binti Meor Yusoff, and Nor Aishah binti Abu Talib

Experiencing Interactive Exhibition Spaces 330
Elyna Amir Sharji, Forest Lim Yan Peng, and Peter Woods

Projection Mapping for Tourism in the City of Esfahan 335
Mohammad Khosravi and Yan Peng Lim

Discrete Wavelet Transform Domain Techniques 340
Farnaz Arab, Salwani Mohd Daud, and Siti Zaiton Hashim

Author Index 346