

# 2009 International Conference on Computer Technology and Development

---

## ICCTD 2009 Table of Contents Volume - 1

|  |       |
|--|-------|
| <b>Preface - Volume 1</b> .....              | xvi   |
| <b>Organizing Committee - Volume 1</b> ..... | xviii |
| <b>Reviewers - Volume 1</b> .....            | xix   |

---

### Session 1

|  |    |
|--|----|
| Simulatio of Traffic Congestion at the Tourist Attraction Spot of Kuching<br>Waterfront, Sarawak ..... | 3  |
| <i>Jonathan Sidi, Liew Wei Fa, and Syahrul N. Junaini</i>  |    |
| Shortest Path Simulation Using Interactive SVG Map .....   | 6  |
| <i>Jonathan Sidi, Liew Wei Fa, and Syahrul N. Junaini</i>  |    |
| Hardware Architecture of Protection Switching Device (PSD) .....                                       | 10 |
| <i>Boonchuan Ng, Aswir Premadi, Noor Azie Azura Mohd Arif,<br/>and Mohammad Syuhaimi Ab-Rahman</i>     |    |
| Intelligent Route Planning for Multiple Robots Using Particle Swarm<br>Optimization .....              | 15 |
| <i>Sai Krishna Mulpuru and Krishna Chaitanya Kollu</i>   |    |
| Systemic Water Analysis - The Procedure .....  | 19 |
| <i>Leow Meng Chew, Lim Poh Wing, and Nanna Suryana Herman</i>  |    |
| Virtual Mid-Line Detection on Curve Road for User Guidance Using<br>Simulation Model .....             | 24 |
| <i>Erma Rahayu Mohd Faizal and Hj. Mohd Asri Hj. Mansor</i>  |    |
| Success Factors for Higher Education ERPs .....  | 28 |
| <i>Razvan Bologa, Ana-Ramona Bologa, and Gheorghe Sabau</i>  |    |

|  |    |
|--|----|
| Architecture for Applying Data Mining and Visualization on Network Flow<br>for Botnet Traffic Detection .....                      | 33 |
| <i>AliReza Shahrestani, Maryam Feily, Rodina Ahmad, and Sureswaran Ramadass</i>  |    |
| An Approach for Heartbeat Sound Transcription .....  | 38 |
| <i>Ehsan Safar Khorasani, Shyamala Doraisamy, and Farshad Arvin</i>  |    |
| Learning Difficulties in Programming Courses: Undergraduates' Perspective<br>and Perception .....                                  | 42 |
| <i>Phit-Huan Tan, Choo-Yee Ting, and Siew-Woei Ling</i>  |    |
| <b>Session 2</b>   |    |
| Combining Fisheye with List: Evaluating the Learnability and User<br>Satisfaction .....  | 49 |
| <i>Aznoora Osman, Mohammad Hafiz Bin Ismail, and Nadia Abdul Wahab</i>   |    |
| Turn-on Time Delay of Uncooled Semiconductor Laser Diode Subject<br>to External Optical Feedback: Theoretical Analysis .....       | 53 |
| <i>Mohammad Syuhaimi Ab-Rahman and Mazen R. Hassan</i>   |    |
| Document Clustering Using Concept Space and Cosine Similarity<br>Measurement .....   | 58 |
| <i>Lailil Muflikhah and Baharum Baharudin</i>  |    |
| Approach of Graphic BPEL Workflow Debugging .....  | 63 |
| <i>Lixin Zhou and Ye Tian</i>  |    |
| Designing and Developing a PDA Food Ordering System Using Interaction<br>Design Approach: A Case Study .....                       | 68 |
| <i>Lim Tek Yong, Choong You Qi, Chai Soon Yee, Alexander Johnson, and Ng Kar Hoong</i>   |    |
| Protection Access Network: An Architecture Approach to Remote Monitor<br>and Control .....   | 72 |
| <i>Aswir Premadi, Boonchuan Ng, M. Mastang, Mohammad Syuhaimi Ab-Rahman,<br/>and Kasmiran Jumari</i>                               |    |
| Artificial Neural Network for Predicting Machining Performance of Uncoated<br>Carbide (WC-Co) in Milling Machining Operation ..... | 76 |
| <i>Azlan Mohd Zain, Habibollah Haron, and Safian Sharif</i>  |    |
| Secure Virtual Application Distribution .....  | 81 |
| <i>Wira Zanoramy A. Zakaria, Mohd Azuddin Parman, Zharfan Hamdan,<br/>Mohd Saufy Rohmad, and Mohd Anuar Mat Isa</i>                |    |
| Intelligent Uplink Bandwidth Allocation Based on PMP Mode for WiMAX .....  | 86 |
| <i>Sun Zhen Tao and Abdullah Gani</i>  |    |
| <b>Session 3</b>   |    |
| Research on Communication Countermeasure Simulation Training System .....  | 93 |
| <i>Lixia Liu</i>   |    |

|  |     |
|--|-----|
| Region of Interest in Disparity Mapping for Navigation of Stereo Vision<br>Autonomous Guided Vehicle .....               | 98  |
| <i>Anwar Hasni Abu Hasan, Rostam Affendi Hamzah, and Mohd Haffiz Johar</i>   |     |
| Optical Switch Controller Using Embedded Internet Based System .....   | 103 |
| <i>Mohamad Syuhaimi Ab-Rahman, Mohamad Najib Mohamad Saupe, and Kasmiran Jumari</i>                                      |     |
| Analysis, Design and Implementation of a Web-Based Payroll Application<br>Software .....                                 | 107 |
| <i>Husin J. Then, Biju Issac, Lau T. Chung, Susanti Wongso, Riyan Bong, Lesley Lu,<br/>and Yu P. Ling</i>                |     |
| Modified Correlative Coding for Frequency Offset Mitigation in OFDM<br>Systems .....                                     | 112 |
| <i>Mohamed Essam Khedr, Nour El-Din El-Madany, and Amr El-Sayed Rizk</i>   |     |
| 2x3 Optical Moderator Based on Planar Waveguide Device for Fttb<br>Application .....                                     | 116 |
| <i>Mohammad Syuhaimi Ab-Rahman, Norazilawati Md-Zain, Seri Mastura Mustaza,<br/>Aida Baharuddin, and Kasmiran Jumari</i> |     |
| Guarding Strategic Points of a Gallery .....   | 121 |
| <i>Mohammad Hosseinzadeh Moghaddam, Alireza Bagheri, Ali Safari Mamaghani,<br/>and Saied Taghavi Afshord</i>             |     |
| Design and Application of a Project-Based Teaching Environment .....   | 125 |
| <i>Ou Jian, Dong Yi-ning, and You Jin-sheng</i>  |     |
| Comparison of Swarm Adaptive Neural Network Control of a Coupled Tank<br>Liquid Level System .....                       | 130 |
| <i>Mohd Syakirin Ramli, Mohd Ashraf Ahmad, and Raja Mohd Taufika Raja Ismail</i>   |     |
| Quality of Service Multicast Routing Protocol for Large Scale MANETs .....   | 136 |
| <i>Mohammad M.M. Qabajeh, Aisha-Hassan A. Hashim, Othman Khalifa,<br/>and Liana K. Qabajeh</i>                           |     |
| <b>Session 4</b>   |     |
| A Scalable Secure Routing Protocol for MANETs .....  | 143 |
| <i>Liana Khamis Qabajeh, Laiha Mat Kiah, and Mohammad Moustafa Qabajeh</i>   |     |
| The Construction and Evolution of Learner Model in Adaptive Learning<br>System .....                                     | 148 |
| <i>Bing Jia, Shaochun Zhong, Wei Wang, and Bin Yang</i>  |     |
| Prospects of Implementing Short Message Service (SMS) Based<br>E-government Model in Bangladesh .....                    | 153 |
| <i>Khaled Mahmud and Khonika Gope</i>  |     |
| Requirements Prioritization in On-line Banking Systems: Using<br>Value-Oriented Framework .....                          | 158 |
| <i>Amir Seyed Danesh, Soolmaz Mir Mortazavi, and Seyed Yahya Seyed Danesh</i>  |     |

|  |     |
|--|-----|
| An Optimized, Mathematical-Based Flight Performance Planning .....   | 162 |
| <i>Arman Rezaee and Saman Izadpanah</i>  |     |
| Remote Sensing Image Fusion Based on Nonsampled Contourlet Transform and PCA .....   | 165 |
| <i>Ding Li</i>   |     |
| Robot Path Planning Using Wave Expansion Approach Virtual Target .....   | 169 |
| <i>Amir Nooraliei and Sami A. Mostafa</i>  |     |
| Feed-forward Techniques for Sway Suppression in a Double-Pendulum-Type Overhead Crane .....                                  | 173 |
| <i>Mohd Ashraf Ahmad, Raja Mohd Taufika Raja Ismail, Mohd Syakirin Ramli, Ahmad Nor Kasruddin Nasir, and Najidah Hambali</i> |     |
| Considering Faults in Service-Oriented Architecture: A Graph Transformation-Based Approach .....                             | 179 |
| <i>Farzaneh Mahdian, Vahid Rafe, Reza Rafeh, and M.R Zand Miralvand</i>  |     |
| An Improved Chinese Segmentation Algorithm Based on Segmentation Dictionary .....  | 184 |
| <i>Yan Niu and Lala Li</i>   |     |
| <b>Session 5</b>   |     |
| Automatic Refinement of Platform Independent Models .....  | 191 |
| <i>Mohamad Reza Zand Miralvand, Vahid Rafe, Reza Rafeh, and Maryam Hajiee</i>  |     |
| Using MDA for Developing SOA-Based Applications .....  | 196 |
| <i>Vahid Rafe, Reza Rafeh, Parvin Fakhri, and Shahrbanoo Zangaraki</i>   |     |
| Verification and Validation of Activity Diagrams Using Graph Transformation .....  | 201 |
| <i>Vahid Rafe, Reza Rafeh, Somayeh Azizi, and Mohamad Reza Zand Miralvand</i>  |     |
| Towards Automated Software Verification and Validation .....   | 206 |
| <i>Somayeh Asadollahi, Vahid Rafe, and Reza Rafeh</i>  |     |
| Automated Model Checking of Stochastic Graph Transformation Systems .....  | 211 |
| <i>Vahid Rafe, Reza Rafeh, Mohamad Reza Zand Miralvand, and Alavie Sadat Alavizadeh</i>                                      |     |
| Architecture of Distributed Traffic Simulation System Based on SOA and Multi-Agents .....                                    | 216 |
| <i>Bingnan Jiang and Hai Zhang</i>   |     |
| Character-Based Indexing Using Inverted Lists .....  | 221 |
| <i>Chouvalit Khancome and Veera Boonjing</i>   |     |
| Deriving Formal Specification Using Z Notation .....   | 225 |
| <i>Roslina Mohd Sidek and Noraziah Ahmad</i>   |     |
| Graph Partitioning Method for Functional Module Detections of Protein Interaction Network .....                              | 230 |
| <i>Afnizanfaizal Abdullah, Safaai Deris, Siti Zaiton Mohd Hashim, and Hamimah Mohd Jamil</i>                                 |     |
| Shared Buffer Approach in Fault Tolerant Networks .....  | 235 |
| <i>Luisito I. Tabada and Pierre U. Tagle</i>   |     |

## Session 6

|  |     |
|--|-----|
| The Utilization of Metrics Usability to Evaluate the Software Quality .....  | 243 |
| <i>Jaroslav Zeman, Pavol Tanuska, and Michal Kebisek</i>   |     |
| Efficient Enhancement of Microarray Image Using Histogram Specification .....  | 247 |
| <i>Satish G. Dappin, Sahana Santosh Shetty, Manjunath S.S., and Lalitha Rangarajan</i>                               |     |
| Flexible Security Protocol in Collaborative Editing Environment: An<br>Overview .....                                | 252 |
| <i>Mohd Adib Omar, Rosni Abdullah, and Fazilah Haron</i>   |     |
| Cargo Projectile Opening Control Strategy Analysis and Rapid Algorithm .....   | 255 |
| <i>Shen Qiang and Ge Mian</i>  |     |
| Path Planning Using Wave Front's Improvement Methods .....   | 259 |
| <i>Hamed Nooraliei and Amir Nooraliei</i>  |     |
| Web Service QoS Prediction Based on Multi Agents .....   | 265 |
| <i>Jaleh Shoshtarian Malak, Mehran Mohsenzadeh, and Mir Ali Seyyedi</i>  |     |
| Using Labeled Hyper Multi Digraph for Tabriz Passenger Traffic Modeling:<br>Data-oriented Approach .....             | 270 |
| <i>Raheleh Olfatkah, Ahmad Habibzad Navin, Nima Jafari Navimipour,<br/>Mirkamal Mirnia, and Seyyed Hasan Yasrebi</i> |     |

## Session 7

|   |     |
|---|-----|
| Interface Design Issues to Enhance Usability of E-commerce Websites<br>and Systems .....                                | 277 |
| <i>Roshanak Safavi</i>  |     |
| Assessment of Learner's Understanding: An Experimental Result .....   | 282 |
| <i>Adidah Lajis and Normaziah Abdul Aziz</i>  |     |
| Cell Breathing and Coverage Prediction in WCDMA .....   | 287 |
| <i>Mohd Dani Baba, Muhammad Yusoff Ibrahim, and Farah Jida Abd Ghafar</i>   |     |
| Improving Performance of Handwork-Fused 1x3 Polymer Optical Fiber<br>Splitter through Progressed Fusion Technique ..... | 291 |
| <i>Mohd Hazwan Harun, Mohammad Syuhaimi Ab-Rahman, and Mohd Hadi Guna Safnal</i>  |     |
| Empire Establishment Algorithm .....  | 295 |
| <i>Seyed Mojtaba Saif, Hamed Shah-Hosseini, and Mohammad Reza Feizi</i>   |     |
| Devising a Biological Model to Detect Polymorphic Computer Viruses<br>Artificial Immune System (AIM): Review .....      | 300 |
| <i>Saman Mirza Abdulla and Omar Zakaria</i>   |     |

## Session 8

|  |     |
|--|-----|
| Collaborative Network for the Development of an Informational System in the SOA Context for the University Management .....                  | 307 |
| <i>Gheorghe Sabau, Ramona Bologa, Razvan Bologa, and Mihaela Muntean</i>   |     |
| Performance of H.264 in Real Time Optimization .....   | 312 |
| <i>Faizul Hadi Bin Mohamad Jamil, Razak Mohd Ali Lee, Terence Daim Jerome, Khairul Anuar Mohamad, and Ahmad Razani Haron</i>                 |     |
| The Development of a Web-Based Claims System .....   | 317 |
| <i>Syed Zulkarnain Syed Idrus, Ahmad Zulhusny Rozali, and Hazry Desa</i>   |     |
| The Monitoring of the Network Traffic Based On Queuing Theory and Simulation in Heterogeneous Network Environment .....                      | 322 |
| <i>Seyed Hossein Kamali, Maysam Hedayati, Abdol Said Izadi, and Hamid Reza Hoseiny</i>   |     |
| Extracting Temporal Rules from Medical Data .....  | 327 |
| <i>Hoda Meamarzadeh, Mohammad Reza Khayyambashi, and Mohammad Hussein Saraei</i>   |     |
| Test-Bed Based Comparison of Single and Parallel TCP and the Impact of Parallelism on Throughput and Fairness in Heterogenous Networks ..... | 332 |
| <i>Mohamed A. Alrshah and Mohamed Othman</i>   |     |
| Review on FPGA-Based Systolic Poisson Solver .....   | 336 |
| <i>Ngoh Jin Yee and Mohamed Othman</i>   |     |
| Improved Inspection Data Quality Using Modified Corrosion Rate Method for Offshore Pipeline Assessment .....                                 | 340 |
| <i>Mazura Mat Din, Md Asri Ngadi, Khadijah Abdul Razak, and Norhazilan Md. Noor</i>  |     |

## Session 9

|  |     |
|--|-----|
| Realization of an Economical Self-Fabricated Polymer Optical Fiber Splitters for Small World Communication ..... | 347 |
| <i>Mohd Syuhaimi Ab-Rahman, Kasmiran Jumari, Hadi Guna, and Mohd Hazwan Harun</i>                                |     |
| Research on the Application of QFD and Knowledge Management in the Outsourcing Software Quality Assurance .....  | 352 |
| <i>Xiong Wei, Wu Zhixin, and Yu Shaozhong</i>  |     |
| Real-time Data Storage Research Based on RAM .....   | 359 |
| <i>Zhang Yan and Liu Wenyi</i>   |     |
| A Method of Program Structure Division Based on Program Understanding .....                                      | 363 |
| <i>Zhang Youwei, Wang Yonghong, and Liu Xiaochun</i>   |     |
| Mobile System Using Natural Language Annotations for Question Answering .....                                    | 367 |
| <i>Malik Sikander Hayat Khiyal, Aihab Khan, and Sidra Khalid</i>   |     |
| A Novel Detection of Network Errors by Study of Raw TCP/IP Packets .....   | 372 |
| <i>M. Ravindran and R. Bhaskaran</i>   |     |
| The Importance of Web Services Using the RPC and REST Architecture .....   | 377 |
| <i>Pirñău Mironela</i>   |     |

## Session 10

|  |     |
|--|-----|
| WsVsSenNet: An Era of Enhanced Vision Based Sensing Capability .....   | 383 |
| <i>Navneet Tiwari, Jatan Saraf, and Siddarth Jain</i>  |     |
| EMD for the Localization of Underwater Target with Time Varying Signal Via<br>Radiated Signal .....                          | 388 |
| <i>Liu Wenhai</i>  |     |
| Study of Soft-sensing Method Used to Predict the Overhead Product Purity<br>of the Styrene Distillation Column .....         | 391 |
| <i>Cao Wei, Zhao Ying-Kai, Li Zhaojie, and Li Zhiliang</i>   |     |
| Obstacles Avoidance and Optimal Path Determination in Mobile Ad<br>hoc Network .....   | 394 |
| <i>Khandakar Entenam Unayes Ahmed, Isahaque Miah, Nur Hossen, and Abdullah Al Aaqib</i>                                      |     |
| Converting 2D Image into Sequence of Curves on 3D Flat Model .....   | 397 |
| <i>Nanik Suciati and Koichi Harada</i>   |     |
| A Novel Spatial Clustering with Obstacles and Facilitators Constraint Based<br>on Edge Detection and K-Medoids .....         | 402 |
| <i>V. Pattabiraman, R. Parvathi, R. Nedunchezian, and S. Palaniammal</i>   |     |
| Betweenness-Centrality of Grid Networks .....  | 407 |
| <i>Indra Rajasingh, Bharati Rajan, and Florence Isido D.</i>   |     |
| Researches on Support Vector Machine Based Semi-Active Control<br>of Structures .....  | 411 |
| <i>Qing Liu and Chunxiang Li</i>   |     |
| Perspectives on Knowledge Sharing System for Special Interest Group (SIG):<br>Culture, Power Issues and User Interface ..... | 416 |
| <i>Aisyah Ismail, Shahida Sulaiman, and Maziani Sabudin</i>  |     |
| A Coupling and Cohesion Metrics Suite for Object-Oriented Software .....   | 421 |
| <i>Sukainah Husein and Alan Oxley</i>  |     |

## Session 11

|  |     |
|--|-----|
| Specific Data Model of Smart Fuel Consumption Cost Estimator .....   | 429 |
| <i>Noraziah Ahmad</i>  |     |
| Study on Expressing Principles of Semantics in Product Design .....  | 433 |
| <i>Zhang Xin, Zhang Jianwu, and Yang Mei</i>   |     |
| Development of Informative System Memory Monitoring .....  | 437 |
| <i>Noraziah Ahmad</i>  |     |
| Hajj-QAES: A Knowledge-Based Expert System to Support Hajj Pilgrims<br>in Decision Making .....                        | 442 |
| <i>Shahida Sulaiman, Hasimah Mohamed, Muhammad Rafie Mohd Arshad,<br/>Nur' Aini Abdul Rashid, and Umi Kalsom Yusof</i> |     |

|  |     |
|--|-----|
| Creation Ontology with Completeness for Identification of 3D Architectural Objects .....               | 447 |
| <i>Yucong Duan</i>   |     |
| A System for Checking Code Numbers on a Credit Card and a Paper of Personal Information .....          | 455 |
| <i>Adisorn Leelasantiham</i>   |     |
| Development of Sarawak Malay Local Dialect Online Translation Tool .....                               | 459 |
| <i>Syahrul Nizam Junaini, Azelina Luk Tzcr Hwey, Jonathan Sidi, and Khirulnizam Abd Rahman</i>         |     |
| Learning Sarawak Local Malay Dialect Using Pedagogical Agent .....                                     | 463 |
| <i>Syahrul Nizam Junaini and Loh Hua Chui</i>  |     |
| Networking Modeling for the Network-in-the-Loop Training Simulation .....                              | 468 |
| <i>Zhi-Chun Gan, Hua Tian, and Jian-Jun Shen</i>   |     |
| Flexible, Wearable Algorithms for Web Services .....   | 472 |
| <i>XiwangYang and Wang Hua</i>   |     |
| <b>Session 12</b>  |     |
| Simulating Flip-Flop Gates Using Peer-to-Peer Methodologies .....                                      | 479 |
| <i>Yao Nan</i>   |     |
| An Evaluation of E-Business with Fin .....   | 483 |
| <i>Yingying Ma</i>   |     |
| The Influence of Distributed Algorithms on Artificial Intelligence .....                               | 488 |
| <i>Feng Ji</i>   |     |
| The Effect of Peer-to-Peer Technology on Algorithms .....  | 492 |
| <i>Lixia Liu</i>   |     |
| Computer Simulation Opportunity In Plastic Injection Mold Development for Automotive Part .....        | 495 |
| <i>Alias Mohd Saman, Abdul Halim Abdullah, and Mohd Asri Mohd Nor</i>                                  |     |
| Pattern Discovery of Web Usage Mining .....  | 499 |
| <i>Shahnaz Parvin Nina, Mahmudur Rahman, Khairul Islam Bhuiyan, and Khandakar Entenam Unayes Ahmed</i> |     |
| A Clustering Algorithm for Datasets with Different Densities .....                                     | 504 |
| <i>Xiaobing Yang, Lingmin He, and Huijuan Lu</i>   |     |
| <b>Session 13</b>  |     |
| A Prototype of FTMK Online Collaboration System via Wireless LAN .....                                 | 511 |
| <i>Ariff Idris, Abd. Samad Hasan Basari, and Nafisah Jusoh</i>   |     |
| Creating Extraction Pattern by Combining Part of Speech Tagger and Grammatical Parser .....            | 515 |
| <i>Yunita Sari, Mohd Fadzil Hassan, and Norshuhani Zamin</i>   |     |
| Multi-Agent Based Virtual Enterprise .....   | 520 |
| <i>Wei Feng and Rulin Wang</i>   |     |



|   |     |
|---|-----|
| Fractal Color Image Compression by Adaptive Zero-Mean Method .....  | 525 |
| <i>Loay E. George and Eman A. Al-Hilo</i>   |     |
| Novel Low Power, High Speed Hardware Implementation of 1D DCT/IDCT<br>Using Xilinx FPGA .....                                       | 530 |
| <i>Rajesh Kannan Megalingam, Vineeth Sarma V., Venkat Krishnan B., Mithun M.,<br/>and Rahul Srikumar</i>                            |     |
| Hardware Implementation of Low Power, High Speed DCT/IDCT Based<br>Digital Image Watermarking .....                                 | 535 |
| <i>Rajesh Kannan Megalingam, Venkat Krishnan B., Vineeth Sarma V., Mithun M.,<br/>and Rahul Srikumar</i>                            |     |
| Performance Evaluation of Adaptive Backoff Algorithms in Ad Hoc Networks .....  | 540 |
| <i>Sasan Zhalehpour, Hadi Shahriar Shahhoseini, and Sara Zhalehpour</i>   |     |
| Music Playlist Recommendation Based on User Heartbeat and Music<br>Preference .....   | 545 |
| <i>Hao Liu, Jun Hu, and Matthias Rauterberg</i>   |     |
| Fast PhyloCon Algorithm Using OpenMP .....  | 550 |
| <i>Hazrina Yusof Hamdani, Nur'Aini Abdul Rashid, Mustafa Fadzil Farid Wajidi,<br/>Atheer Akram Abdulrazzaq, and Rana M. Ghadban</i> |     |
| Sandglass Model of Next Generation Internet Data Transport Protocol .....   | 554 |
| <i>Liu Yong-Min, Yu Shao-Jun, and Nian Xiao-Hong</i>  |     |
| <b>Session 14</b>   |     |
| The Architecture and Characteristics of Wireless Sensor Network .....   | 561 |
| <i>Liu Yong-Min, Wu Shu-Ci, and Nian Xiao-Hong</i>  |     |
| Reflection of Network Security Caused by a Wheel .....  | 566 |
| <i>Ruan Hong-Wei, Li Hua, Ao Teng-He, and Wu Cheng-Yong</i>   |     |
| Feedback Arc Set in Oriented Graphs .....   | 569 |
| <i>Indra Rajasingh, Bharati Rajan, and Little Joice</i>   |     |
| Multi-label Detection Method in Warehousing Wireless Scanning System .....  | 574 |
| <i>Yao Sufen, Zhu Cheng, and Lin Fei</i>  |     |
| Security Model Based on Network Business Security .....   | 577 |
| <i>Wu Kehe, Zhang Tong, Li Wei, and Ma Gang</i>   |     |
| A New Method for Color Image Steganography Using SPIHT and DFT,<br>Sending with JPEG Format .....                                   | 581 |
| <i>Asghar Shahrzad Khashandarag and Naser Ebrahimian</i>  |     |
| Influence of Rendering Intents on the Gamut Volume and the Visual<br>Evaluations in Digital Proofing .....                          | 587 |
| <i>Maohai Lin, Shisheng Zhou, Mao-hai Lin, and Yunhui Luo</i>   |     |
| A New Fabric of Dynamic NOC for Communication in Reconfigurable<br>Devices .....  | 590 |
| <i>Pan Jing-wei and Yan Bo</i>  |     |

|  |     |
|--|-----|
| Conceptual Framework for a Heuristics Based Methodology for Interface<br>Evaluation of Educational Games ..... | 594 |
| <i>Hasiah Mohamed Omar and Azizah Jaafar</i>   |     |

## Session 15

|  |     |
|--|-----|
| The Effect of Technological Improvement on the Development of Photovoltaic<br>Industry .....                                       | 601 |
| <i>Chen Ming</i>   |     |
| Research on China's Photovoltaic Industrial Restructuring .....  | 606 |
| <i>Tao Chun-hai</i>  |     |
| On Chinese Monetary Policy's Validity .....  | 611 |
| <i>Dai Shu-Yang</i>  |     |
| On Jiangxi's Alignment with Yangtze River Delta-Zhujiang River<br>Delta-Fujian Golden Delta and Involvement in Globalization ..... | 616 |
| <i>Dai Shu-Yang</i>  |     |
| Research on Brand-name Extension Strategy of Real Estate in China .....  | 621 |
| <i>Guo Ya-Xiong</i>  |     |
| Research on Strategic Transition and Industrial Structure Upgrading<br>of Chinese Bonded Ports and Zones .....                     | 626 |
| <i>Guo Ya-Xiong</i>  |     |
| Research on Development of Ecotourism in Poyang Lake .....   | 631 |
| <i>X.M. Han</i>  |     |
| The Application of Web Technology In Electronic Commerce .....   | 636 |
| <i>Hang X.M.</i>   |     |
| On Measures of Promoting Independent Innovation of Small-<br>and Medium-Sized Enterprises in the Context of Financial Crisis ..... | 641 |
| <i>Hu Yu-Chen</i>  |     |

## Session 16

|  |     |
|--|-----|
| Research and Application of SOA in B2B Electronic Commerce .....                             | 649 |
| <i>Li Xiong-yi</i>   |     |
| Research on Knowledge Management of Software Enterprises with Lenovo<br>for Case Study ..... | 654 |
| <i>Lin Lan</i>   |     |
| Research on Promotion Policies of China's Photovoltaic Industry .....                        | 659 |
| <i>Liu Biao-wen</i>  |     |
| On Game Balance in Market-oriented Public Utility Reform .....                               | 664 |
| <i>Wang Zi-li and Liu Xiu-ming</i>   |     |
| On the Deep-rooted Cause of Public Utility Reform .....                                      | 668 |
| <i>Wang Zi-li and Liu Xiu-ming</i>   |     |

|   |            |
|---|------------|
| Problems and Countermeasures of Public Sector Human Resource<br>Management In China .....                         | 673        |
| <i>Zhang Bi-an</i>  |            |
| Study on Industrial Ecosystems of Poyang Lake Ecological Economic Zone .....                                      | 678        |
| <i>Zhang Xiao-feng and Li Sheng-Lang</i>  |            |
| Practice of Strategic Human Resource Management In the Enterprise .....   | 683        |
| <i>Zhu Hui</i>  |            |
| On Motivation/Incentive of Knowledge Employees of Virtual Enterprises .....                                       | 687        |
| <i>Ke Jian-Chun</i>   |            |
| A Study Report about Defensive Strategies Based on Strength Comparison<br>among Different Enterprises .....       | 692        |
| <i>Li Guang-Jin, Deng Ke, and Zhou Xin-Yin</i>  |            |
| Research on Complete Risk Management of Chinese Commercial Banking<br>Based on the New Basel Capital Accord ..... | 696        |
| <i>Ke Jian-Chun</i>   |            |
| <b>Author Index - Volume 1</b> .....  | <b>701</b> |