## **Table of Contents**

E-business and Strategic Management: E-valuation Quality Performance based on ADAM Methods Alexandra Lipitakis and Evangelia Lipitakis	1
Comparing Travelling Design Patterns for Mobile Agent Development Using JADE Nikolaos Karagiannis, Konstantinos Giannakos, and Konstantinos Antonis	8
A Simple M2M Overlay Entity Discovery Protocol Teemu Vaisanen	14
An Interactive Game Using Wii Remote for Visually Impaired People Huai-Yong Deng, Hsiao Ping Lee, and Jun-Te Huang	20
Impulsive Control of Chua's Circuits Based on Rule-Wise Linear Computational Verb Systems <i>Xuyang Lou</i>	24
A Multi-Agent's Modeling for the 4D Model of hiv Dynamics Toufik Laroum and Bornia Tighiouart	28
Applications of RFID in Incident Management Amir Shamdani and Barbara Nicolai	34
A Timed Colored Petri-Net-based Modeling for Contract Net Protocol with Temporal Aspects Djamila Boukredera, Ramdane Maamri, and Samir Aknine	40
State Complexity of Hidden Markov Model Jamil Ahmed, Stephen M. Watt, and Sherjil Ahmed	46
The Application of Hierarchical Linear Model in the Study of Tumor Progression <i>Shuang Li, Pu Wang, Liying Fang, and Peiyu Chen</i>	52
Influence of Nutrient Limitation on Bacterial Patterns: Applying a new Bacterial Cellular Automaton Growth Model Jean-Denis Mathias	57
Modeling User Experience - An Integrated Framework Employing ISO 25010 Standard Maissom Qanber Abbasi, Philip Lew, Irfan Rafique, Jingnong Weng, and Yunhong Wang	63
Advancing Disaster Response Systems: Implementing Biometric Technologies as Demographic Identifiers Omorodion Eguasa and Barbara Nicolai	70

Solving Shortest Hamiltonion Path Problem Using DNA Computing Hala Alshamlan and Mohammed Menai	76
Rapid DNA Signature Discovery Using A Novel Parallel Algorithm Hsiao Ping Lee, Yen-Hsuan Huang, and Tzu-Fang Sheu	83
Does Collarette of Iris Work for Recognizing Persons? Ren-He Jeng, Wen-Shiung Chen, and Lili Hsieh	89
Development of Teacher Competencies in a New Learning Environment in Higher Education <i>Gyorgy Molnar</i>	95
Technology Powered Learning at Academic Institutions - Personal Credit Portfolio Danuse Bauerova	100
Knowledge-Based Visualization of Textual Information Applied in Biomedical Text Mining Joseph Leone and Dong-Guk Shin	107
Requirements Defect Density Reduction Using Mentoring to Supplement Training John Terzakis	113
MoBiSiS: An Android-based Application for Sending Stego Image through MMS <i>Rosziati Ibrahim and Chia Kee Law</i>	115
Development of a Virtual Input Device Using Stereoscopic Computer Vision to Control a Vehicle in a Racing Game Thiago Azeredo, Italo Matias, and Weverson Oliveira	121
Automated Infarction Core Delineation Petr Maule, Jana Kleckova, Vladimir Rohan, and Radek Tupy	127
An Application of the Checkstand Antitheft System by Means of the Image Recognition Technique Sung Min Hong, Dong Ryoung Seo, Dong Sin Kim, Do Won Hyun, and Ju Wook Jang	131
Extending RTOS Functionalities: an Approach for Embedded Heterogeneous Multi-Core Systems Shuichi Oikawa, Gaku Nakagawa, Naoto Ogawa, and Shougo Saito	136
The Impact of a Requirements Specification on Software Defects and Quality Indicators John Terzakis	140
Height Map Viewer - Tool not only for the Laser Engraved Sample Exploration Jana Hajkova	142

Variability Identification by Selective Targeting of Significant Nodes Anilloy Frank and Eugen Brenner	148
Impacts of a Whole Person eAssessment on Students' Learning Performance and Faculty Development <i>Koichi Nakajima</i>	154
Using Git to Manage Capstone Software Projects Zhiguang Xu	159
An Overview of the Student-to-Student Chinese Language Learning Lab Lilia Cai Hurteau and Peter Shea	165
Static Task Allocation Algorithms in Mesh Networks: An Experimentation System and Analysis of Properties <i>Piotr Franz, Leszek Koszalka, Iwona Pozniak-Koszalka, and Andrzej Kasprzak</i>	169
Does Chaos Exist in Social Network Components? Role of Evolutionary Dynamics and Tool Hameed Al-Qaheri, Soumya Banerjee, and Goldina Ghosh	175
Multi-modal Optimization using a Simple Artificial Immune Algorithm Tad Gonsalves and Yu Aiso	183
Data Clustering Using Bee Colony Optimization Khadijeh Keshtkar mizooji, Abolfazl Toroghi Haghighat, and Rana Forsati	189
Evaluation of Preferred Brightness and Detail Levels in 3D and 2D Images Based on HDR Tone Mapping Zicong Mai, Colin Doutre, Panos Nasiopoulos, and Rabab Ward	195
A ARAF: An Asynchronous Router Architecture using Four-Phase Bundled Handshake Protocol Syed Rameez Naqvi	200
Unsupervised Information-Based Feature Selection for Speech Therapy Optimization by Data Mining Techniques <i>Mirela Danubianu, Valentin Popa, and Iolanda Tobolcea</i>	206
Software Learnability Evaluation An Overview of Definitions and Evaluation Methodologies for GIS Applications Irfan Rafique, Jingnong Weng, Yunhong Wang, Maissom Qanber Abbasi, and Philip Lew	212
Mix-matrix Method in Problem of Discrete Optimization Iakov Karandashev and Boris Kryzhanovsky	218
Minimising Expected Misclassification Cost when using Support Vector Machines for Credit Scoring <i>Terry Harris and Curtis Gittens</i>	225
A Comparison of Algorithms to Construct Ontologies from Relational Databases	232

Sameen Fatima and Quratulain Rajput	
Selection of Adaptive Strategies on Main Agent's Attitude Based on Historical Learning <i>Guorui Jiang and Hong Guo</i>	238
Extended Enterprise Integration Model Associated with Automation Index Rita Bittar, Oswaldo Agostinho, and Gislaine Fernandes	243
A Method for Finding Similar Time Series and Forecasting with Calendar Constraints - a Commercial Bank Case Study Krzysztof Kania and Jerzy Michnik	250
Crowdsourcing Supported Context Detection for Improving Information Search Activities Michael Beul and Stefan Eicker	254
An Implementation of Discriminative Common Vector Approach Using Matrices Mehmet Koc and Atalay Barkana	260
Application of Head Tracking for Interactive Data Visualization Phillip Kilgore, Charles McCarthy, Urska Cvek, and Marjan Trutschl	264
Chinese Blog Classification Based on Text Classification and Multi-feature <i>Jianzhuo Yan, Suhua Yang, and Liying Fang</i>	271
Stability Analysis of Cohen-Grossberg Neural Networks With Unbounded Delays Xuyang Lou, Baotong Cui, and Qian Ye	277
Environmental Codes for Autonomous Position Determination Kamen Kanev, Hirotaka Kato, Reneta Barneva, Zhuojun Fu, and Shigeo Kimura	282
Policy-Based Autonomic Collaboration for Cloud Management Omid Mola and Mike Bauer	288
Mobile Custom-made Handheld Chemical Detection Device Iem Heng, Andy Zhang, and Raymond Yap	294
A Behavior-Based Method for Rationalizing the Amount of IDS Alert Data Teemu Alapaholuoma, Jussi Nieminen, Jorma Ylinen, Timo Seppala, and Pekka Loula	302
The Application of Fuzzy Clustering in Life Quality Assessment of Lung Cancer Patients <i>Peiyu Chen, Liying Fang, Pu Wang, and Shuang Li</i>	308
Mobility platform for video content with Augmented Reality	311

Angel Garcia Crespo, Israel Gonzalez Carrasco, Jose Luis Lopez Cuadrado, Carlos Celorrio, and Alvaro Gonzalez	
The Design and Implementation of Bare PC Graphics Alexander Peter, Ramesh K. Karne, Alexander L. Wijesinha, and Patrick Appiah-kubi	315
Formal Performance Measures for Asymmetric Communication Paulius Tervydis, Ramutis Rindzevicius, and Jonas Valantinas	321
PMIPv6-based Inter-Domain Handover using Efficient Buffering Scheme Daeseon Park, Minsoo Woo, and Sung-Gi Min	327
Upper Bounds and Optimal Solutions for a Deterministic and Stochastic Linear Bilevel Problem <i>Pablo Adasme and Abdel Lisser</i>	333
Measuring the Objective Complexity of Assembly Workstations Luiza Zeltzer, Veronique Limere, El-Houssaine Aghezzaf, and Hendrik Van Landeghem	341