Contents:

JDCTA: Editorial Board ................................................................................................ i
JDCTA: Call For Paper & Special Issue ........................................................................ vi

Improved Image Target Detection Based on Component Analysis .................. 1
Xin Hu, Lei Yu, JuYong Feng

Image Fusion Based on the Discrete Wavelet Transform ............................. 8
Guojiang Xin, Beiji Zou, Haoyu Zhou, Meiling Cai, Jianfeng Li

Application of Quadratic-Standard Form Based on LEACH Protocol Analysis .......................................................... 16
Chunyao FU, Wei WEI, Ang WEI

Traffic Flow Simulation Model Based on Kirchhoff's Law ......................... 27
Jianming CUI, Jing MA

The Impact of Task Technology Fit, Perceived Usability and Satisfaction on M-Learning Continuance Intention .......................................................... 35
Tsai-Fang Yu, Yun-Chen Lee, Tung-Sheng Wang

The Safety Assessment Model of Stone Arch Bridge Based on Fuzzy Synthetic Evaluation .......................................................... 43
Liqun Wu, Liangliang Zhang, Jianting Zhou

Utilizing Hybrid Method for GPS Data Preprocessing ............................... 53
MA Qinglu, LIU Weining, SUN Dihua

Study on the Data-Exchange Mechanism for the Third-Party Supply Chain Collaborative Commerce Platform .......................................................... 61
SONG Wei, YANG Dan, LIU Wei-ning

Model for Evaluating Urban Water Shortage Risk: A Case Study in Beijing ..... 68
Yi-qun Yao, Yuan-biao Zhang, Jin-ding Liu, Zhong-jie Shen, Bo-wen Liu

A Lightweight RFID Authentication Protocol for Mobile Reader .................. 80
He Jialiang, Ouyang Dantong, Bai Tian, Zhang Liming
The Research and Implementation of Three-dimensional Accident Simulation System in Substation
Guangwei Yan, Yanfang Wang, Jizhou Zhao

Design and Analyse of Silicon Carbide JFET Based Inverter
Zheng Xu, Sanbo Pan

Research on the Fast ICA and SVDD based Fault Feature Extraction Algorithm for Analog Circuit
Lan Jingchuan

Research on a New Large-scale Analog Circuit Fault Diagnosis Method
Lan Jingchuan

Optimization and Hardware Implementation of the AAC Inverse Quantization Algorithm for Portable DAB+ Receivers
Mingying Lu, Hongsheng Zhang, Guoyu Wang, Tao Jiang, Guangyu Guo

Registration of Remote Sensing Image Based on Hierarchical Invariant Feature
Dong Yang, Jianguo Wen, Shuangzhi Zhu, Qi Cheng

Model for Evaluating the Computer Network Security with Interval-Valued Intuitionistic Fuzzy Information
Yuping Li, Jingyuan Yin, Guoqiang Wu

Research on the Energy Optimization Based on the Clustering Algorithm
Tao Liu, Yang Li-lin

An improved skin pixel detection method based on statistical model and Markov network
Mao Keming, Zhu Zhiliang, Jiang Huiyan, Deng Zhuofu

3D Texture Feature Extraction Based on a Cubic Uniformity Interpolation Method for Emphysema in Chest CT Images
Yin-rong Fu, Hao-yue Lin, De-hui Yuan, Sheng-yun Yang

Design of virtual dashboard based on the SOC with graphic display controller integrated in
Tong Guo-xiang, Wang Jing-zhao, Li Yi, Zhu Zhen-ning, Shen Meng
Multi-objective Service Pool Size Allocation using Memetic Algorithm
Pan He, Kaigui Wu, Junhao Wen, Haijun Ren

An Operation Scheme and Profit-making Mode Based on Dynamic Ebusiness Service System and Diversified Benefit for MISP
Pengshou XIE, Zhiyuan RUI, Jie CAO

Application and Comparison of Two Mathematical Models for Simulating Grain Heat and Mass Transfer During In-Bin Drying
Liu Jingyun, Zhou Huiling, Zhou Xiaoguang

The Study on Engineering Cost Control based on Life Cycle Costing Theory
Dong Jin

Assessment System based on Scaffolding and Bloom’s Theory
Yung-Hui Chen

A design framework for a conceptual multi-dimensional learning assessment system
David Tawei Ku, Wen-Chih Chang

Enhancement of learning by using an Online SQL Learning System with Automatic Checking Mechanism
Ming-Hsiung Ying, Nai-We Chi, Yang Hong

Incorporating 3D-Virtual Reality into Language Learning
Liang-Yi Chung

Toward the Emotional Factors on Social Network Relationships: Impacts of Hostility Behaviors
I-Mei Lin, Yuan-Chu Hwang

Extending Information System Acceptance Theory with Credibility Trust in SaaS Use
Yu-Hui, Wang

Combining Artificial Intelligence with Non-linear Data Processing Techniques for Forecasting Exchange Rate Time Series
Heng-Li Yang, Han-Chou Lin
Trend Analysis of Virtual Community Productivity Based on SSCI Database by Bibliometric Methodology................................................................. 284
Chien-Liang Lin, Wan-Chu Yen, Heng-Li Yang

Semantic Web Information Retrieval Based on the Wordnet...................... 294
Che-Yu Yang, Shih-Jung Wu

WSN-based Automatic Monitoring Management Platform for Plant Factory............................................................................................................. 303
Mei-Yu Wu, Ya-Hui Lin, Chih-Kun Ke

Use of Artificial Immune Algorithm with Memory and Suppressor Cells to Optimize the Placement of RFID Portal Reader Antennas......................... 312
Yung-Hao Kao, Chi-Chung Lee

The Australian e-Government Strategy Development and Outcome............ 322
Shrane-Koung Chou, Jan-Shan Lin

An Effective Stock Portfolio Trading Strategy using Genetic Algorithms and Weighted Fuzzy Time Series.............................................................. 333
Yungho Leu, Tzu-I Chiu

Community Discovery Algorithm Research of in Complex Network.............. 345
ZHANG Kai, FENG Qiao-juan

Developing Foresight-Based IT Governance Strategies Through Scenario Analysis...................................................................................................... 353
Kuo-Tai Tang, Shrane-Koung Chou