

2009 Asia-Pacific Conference on Computational Intelligence and Industrial Applications

(PACIIA 2009)

**Wuhan, China
28 – 29 November 2009**

**Volume 1
Pages 1-503**



**IEEE Catalog Number: CFP0948F-PRT
ISBN: 978-1-4244-4606-3**

Volume 1 Table of Contents

Main Conference Papers

An algorithm to segment the ventless tire mold Yi-Chih Liu and Sheng-De Wang	1
Model and Tool Integration for Modern Diesel Engine Management System Development Huang Tiexiong, Gao Shilun	5
A Novel Distributed Admission Control Mechanism in Mobile Ad Hoc Network Wang Ru-yan, Wu Da-peng, Xu Lei	10
Delay-Range-Dependent Stability for Static Recurrent Neural Networks with Time-Varying Delays Wei Zhang, Wei Feng, Haixia Wu	16
Statistical Feature Representations for Automatic Wood Defects Recognition Research and Applications Si-yuan Wu, Zhao Zhang, Liang Feng	19
RoboCup is a Stage which impulse the Research of Basic Technology in Robot Ying Liu, Jian-hua Liu	23
Study on Legal Affairs about E-insurance Zhang Xiaoyu	29
Analysis on Energy Consumption Sustainable Development in China Based on DEA Yingling Shi, Hongsong Yang, Fugang Zhang, Liping Wang	32
Kriging Space Surface Fitting and Application based on Genetic Algorithm Zhifeng Liu, Zhenhua Wei, Xia Ju	38
Workflow Data Patterns based analysis of Xinpai-Driven model HOU Hong, LI Xiao-na, Hao Ke-Gang, Song Qin-bao	42
A Hybrid Neural Network and Freight Volumes Application Qing Chen, Zhifeng Liu, Zhenhua Wei	47
Design and Application of Fog Monitoring System Based on RS and GIS Fengbin Zheng, Baojun Qiao, Jun Ma, Shenshen Li	51
Research on Approximate Solution for Nonlinear Multi-variables Harmonic Control System Shaozhong Cao, Yang Li	55

Mining Maximal Sequential Patterns with Layer Coded Breadth-First Linked WAP-Tree Lizhi Liu, Jun Liu	61
An Online Calibrating Method for Middle Value of Current Measurement Circuit in Permanent Magnet Synchronous Motor Drives Xiaofei Qin, Yunkuan Wang, Zhiqiang Wei and Jun Zheng	66
A Zeros-Watermarking Algorithm Based on Chaotic System and DCT Weimin Yang, Lingmei Meng	71
Computer Simulation Design and Implementation of PLC Internal Clock Jinjiao ZHANG	75
The Research on the Query Optimization Strategy of the VDSI System Database Peijun Sun, Zhengde Zhao, Zhiyun Ge	79
An Image Template Matching Method Using Particle Swarm Optimization Xiaoxiang Liu, Weigang Jiang, Jianwen Xie, Yitian Jia	83
Analysis of DB Files Based on Compound Document Format Jiajia Liu, Fanlin Meng, Jialong He, Shunxiang Wu	87
Fuzzy Partial Correlation Rules Mining Hao-En Chueh, Nancy P. Lin	91
Research of Internet Worm Behavior Simulation Based on Grid Yang Liu, Bai-ling Wang, Bin Li, Kai-kun Dong	95
Deformation Prediction of Foundation Pit Using Gaussian Process Machine Learning Guoshao SU, Keshi ZHANG, Huanling ZHANG, Yan ZHANG	99
Design of a Pulse Sequence Generator in P-NMR based on Single-chip Microcomputer and CPLD Wen-li Wang, Chun-feng Liang, Jin Wu, Zhi-xin Shang	103
A Combined Method of Weak Signal Detection Lv Huiying, Cao Zhiyu, Yan Xiaopeng, Li Ping	106
Service-based Domain Requirements Completeness Analysis Wei Liu, Chengwan He, Kui Zhang	110
Research of DSO Application in PKI System Xiang Gao, Zi-Tang Ma, Ying Liu	11*
An Adaptive Denoising Method for Tongue Images in Traditional Chinese Medicine Peiti Li, Huiyan Wang	119

Immunevionics: Avionics Fault Tolerance Inspired by the biology System Guodong Wang, Chong Wang, Bo Zhou, Zhengjun Zhai	123
Design and Implementation of a Distributed Web Service Directory in SOA-oriented Urban Spatial Information Sharing Platform Ming-Qiang Guo, Ying Huang, Xian-Gang Luo, Yong Liu	127
Container Process Flow Visualization by Spatial Location Technologies Hong Cai, Zhi-Hua Hu, Wei Liu	131
Implement Fault Tolerant in Distributed DEVS Simulation Bin Chen, Xiao-gang Qiu	135
Exploring the Bullwhip Effect through Supply Chain Simulation Software Li Zhuoqun, Duan Nannan	139
Reduction Algorithm of Attribute Based on Discernibility Degree XiangPeng Li, Min Dong	143
The Application of Linear Adjoint Method in Rocket Ballistic Error Analysis Dunhui Zhao, Jiabin Chen, Jun Xu, Zhide Liu, Yongqiang Han	146
Analysis and application of Modified Methods of Wavelet Threshold Functions Li Jianmin, Xiong Shibo	150
Study on Regional Competitiveness Assessment Theory and Its Application Li Chuang	154
The Comparison of Financing Behavior of Listed Company between China and Foreign Countries and Reason Analysis Wang Li-ping	158
On Human Resource Management of Network Organization Fucai Lu, Wei He	162
Research on XML-based Component Library and Its Application Linlin Qiu, Yan Peng, Wei Zhang	166
Automatic Face Replacement in Photographs Based on Active Shape Models Feng Min, Tongwei Lu, Yanduo Zhang	170
Study on a Flexible Workflow Technology and Its application Jinxiang Wu, Yan Peng, Wei Zhang	174
Fault Diagnosis of Gear Box Based on Multi-weight Neural Network Zhigang Chen, Xiangjiao Lian	178

Estimation of projected circle centers from array circles and its application in camera calibration Zhao zheng, Wei Zhenzhong, Zhang Guangjun	182
Forecasting Stock Returns using Variable Selections with Genetic Algorithm and Artificial Neural -Networks Prisadarng Skolpadungket, Keshav Dahal, Napat Harnpornchai	186
Reduced Complexity ML Detection Algorithm for V-BLAST Architectures Wenbai Chen, Xiaopin Zhang, Wei Li	190
Study on Software Reliability Growth Model Han Qingtian, Cao Wenjing, Li Lian, Gao Xiaoyan	194
Identifying Potentially User-Interested Concepts in an Ontology Yixi Chen, Xiaohu Yang, Keting Yin	198
The Reliability Optimum Design of the Main Driving Gear Transmission of Shield Machine Based on Kriging Model Yanwei Zhang, Guohua Cui	202
A Novel Image Segmentation Method Based on Random Walk Yi-hua Lan, Cun-hua Li, Yong Zhang, Xue-feng Zhao	207
Multi-class Spectral Clustering Based on Particle Swarm Optimization Li-Feng Liu, Yan-Yun Qu, Cui-Hua Li, Yuan Xie	211
An Irregular Cutting Based Distributed Mapping Algorithm for DVE Systems Wei Zhang, Hangjun Zhou, Yuxing Peng, Sikun Li, Min Xi	215
Financial Revenue Analysis based on Association Rules Mining Zhi-min XU, Rui ZHANG	220
A Sentence Selection Method of Query-Based Chinese Multi-Document Summarization Xin Song, Jia Huang, Jing-min Zhou, Hui Zhang	224
An Adaptive Protocol for Pattern Recognition and Estimation of Time Synchronization in WSNs Qiang Liu, Jinglun Zhou, Guang Jin, Min Xi, Weizhong Li	229
Chinese multi-document summarization Based on Topic Detection technology LIU Mei-ling, ZHAO Tie-jun	233
A Method for Constructing Simplified Kernel Model based on Kernel-MSE Qi Zhu, Yong Xu, JinRong Cui, ChangFeng Chen, JingHua Wang, XiangQian Wu, YingNan Zhao	237

Site Selection of Metropolitan Shared Mechanical Parking Garage Based on Spatial Data Mining Minan Tang, Enen Ren	241
Extraction of Numerical Strings in Farsi/Arabic Documents Using Structural Features Ali Abedi, Karim Faez, Saeed Mozaffari	245
Ranking of generalized fuzzy numbers and its application to risk analysis Beatrice Lazzarini, Lusine Mkrtchyan	249
Research on Key Technologies of Knowledge-Based Engineering Decision Support System for Circular Economy Weibo Li, Wei Shen, Weiya Chen	253
Robust Geomagnetic Aided Inertial Navigation of Underwater Vehicles using the ICP Algorithm Muhammad Ejaz, Javaid Iqbal, Nasir Ahsan and Akhtar Nawaz	257
TDMA Channel Scheduling Algorithm under Blacklist Technology Xiaoling Zhang, Wei Liang, Fuqiang Wang, and Haibin Yu	263
Adaptive Timeslot Scheduling of Long Cycle Data in WIA-PA Network Xiaoling Zhang, Wei Liang and Haibin Yu	267
Source Number Estimation Methods Base On Suooprt Vector Machine Algorithm Zhao hui-qiang, Zhao bo, Quan-houde, Zhang Yu-ping	272
A Study of Consultation Management of Building Intellectualization Projects Fan Tongshun, Su Wei, Dong Nanping	276
Research of an E-mail Forensic and Analysis System Based on Visualization Fanlin Meng, Shunxiang Wu, Junbin Yang, Genzhen Yu	281
Two Simplified Methods for Linear Turbo Equalization Ke Xu, Behnam Shahrrava, Jianwei Wan	285
Pedestrian Tracking in Infrared Image Sequences using Wavelet Entropy Features Jianfu Li, Yong Wang	288
The Research of Clustering Protocol Based on Chain Routing in WSNs Zheng Gengsheng, Liu Xiaohua, Hu Xingming, Zhang Weidong	292
Reduction of the Noise and Speckle in Doppler Blood Flow Spectrograms by Using Matching Pursuit with Pulse Coupled Neural Network Haiyan Li, Yufeng Zhang, Dan Xu , Zhengyao Bai	296

The Assessment of Environment Effect of Foreign Trade Based on BP Neural Network and Multiple Linear Regression Jianna Zhao, Shanying Lu	300
Coal mine enterprises merger and acquisition prediction based on wavelet neural network NING Yuncai, CHEN Xiang	304
Collaborative Localization Algorithm for Wireless Sensor Networks Using Mobile Anchors Baoli Zhang, Fengqi Yu, Zusheng Zhang	309
Static decoupling design method of electromechanical system mechanical structure Zhang Yi, Wang Qiang, Fang Zi-fan, Zhang Hu	313
Parallel Blind Equalizer Suitable for QAM Signal Wen-qun Tan, Xing-wang Zhang, Wei Rao, Fei Xia, Hui-jun Xu, Jian-bing Liu, Yuan-ming Li	317
Design and evaluation of shared buffer based NoC Zhang duoli, Hou ning, Du gaoming, Geng luofeng, Jia jinghua	321
A New Approach to a Sliding Mode Controller design for a Magnetic Levitation System Vithal S. Bandal, Ph.D, Pratik N. Vernekar	326
A Novel Optical Fiber System for Non-touch Detecting Roll Wear Based on Neural Network and Software Imitation Guo Yuan, Liu Zhengliang	330
Control System of Emergency generator set Based on Wireless sensor networks Luo Hui	334
The Analysis of Value Chain and Application Models on M-commerce Chen Xin	337
Improving Credibility of Systems Integrity Measurement of Property Remote Attestation CUI Yan-Li, ZHANG Xing	341
Reinforcement Learning-Based Annotation for Deep Web Data Yuefeng Lv, Yuchen Fu	345
Research of sequence diagram drawing method in intermittent control system CHEN Xiaoxia, WANG Changyou	349
CMS Applications in Metal Mines of China Xiaoming LIU, Zhouquan LUO, Wenni YUAN, Guang LU, Qingling ZHU	353
Geology automatic plotting based on secondary development of Surpac Xiaoming LIU, Zhouquan LUO, Zhenyan LUO, Chang LI, Qingling ZHU, Guiqiang YUAN	357

A Novel Effective Protocol Design for Wireless Ad hoc Networks Lixin Li, Huisheng Zhang	361
Approach for Recognition of True and False Specific Sample Points Bai Bin, Wang Hongli, Gao Yarong, Guo Jianxiao	365
Online Prediction and Intelligent Control for Structural Vibration Based on Neural Networks Jianjun Liu, Kaiquan Xia, Caixia Zhu	369
Ontology Concept Similarity Measurement and Validation in Semantic Query Wu Chengwen, Li GeXin, Huang Changcheng	373
Noise Reduction Algorithm for Robust Speech Recognition Using MLP Neural Network Masoumeh P. Ghaemmaghami, Farbod Razzazi, Hossein Sameti, Saeed Dabbaghchian, Bagher BabaAli	377
An Integrated Approach for Detecting Approximate Duplicate Records Qin kan, Yujiu Yang, Wenhuan Liu, Xiaodong Liu	381
Monthly Tuna Catches Forecasting Using Multiscale Additive Autoregression Nibaldo Rodriguez, Orlando Duran	385
Resolution Enhancement Through ROI Selection Method Farshid Allahverdi, Karim Faez, Saeed Mozaffari	389
An Optimal Infrastructure Design Method of Cloud Computing Services from the BDIM Perspective Hao Shi, Zhiqiang Zhan	393
A Novel Fault Detection Mechanism of Topology-aware ALM Jianqun Cui, Libing Wu, Dan Wu, Xi Peng	397
The comprehensive evaluation model of the algorithm for the association rules based on AHP Li Zhigang, Hou Haizhen, Gu Yan, Zhao Wei	401
Analysis of The Effect of Atomizer Spray Refrigeration in High-temperated Caving Face by Stochastic Model LIU Guannan,GAO Feng, LIU Xingguang, KANG Zongxin	405
Investigation of the Distribution of the Temperature Field in High Temperature and High Humidity Caving Face LIU Guannan, GAO Feng, GAO Yanan, LIU Xingguang	409
Geometry Modelling of Interwoven Yarn for Woven Fabric DENG Zhongmin, Zhong Yifang, HU Xinrong, LU Hongmei	413

Asymptotic Method for Parabolic Partial Differential Equation with Periodical Boundary Value Condition Xin Cai	417
Finite Volume Method and Asymptotic Method for Parabolic PDE Involving Some Small Parameter Xin Cai	421
Research on the Location and Recognition Methods for Traffic Signs Zhao Bo, Zhang Tie Feng	425
A Method Inspired from Differential Coefficient for Calculating Danger Signals in Artificial Immune System Yang He, Liang Yiwen, Li Tao, Mao Bo	429
H ∞ Drive Control Strategy for Mining Electric Locomotive Zhang Chuanwei	433
Design of the Embedded Remote Monitor System for Building Automation System Based on the VxWorks Liao Wenjiang, Dong Nanping, Fan Tongshun	436
Visual Aid for Better Control Parameter Configuration of Differential Evolution Miroslav Červenka, Hana Boudná	437
Research and Realization of A Network Fault Locating Algorithm Wei Guo, Qing Chen	443
A New Dynamic Routing Protocol of Wireless Ad hoc Network Zhao Min, Zhou Jiliu	447
Embedded System of Oil Wells Monitoring Base on GPRS Yan Liu, Lin Huang, Yang Xu	451
Blind Adaptive Filter with Detection of PAM Signal Xing-wang Zhang	455
Commitment's Impacts on Product-supplementary Service Market with Information Asymmetry Tiesong Shen, Zhongkai Xiong, Xuzhi Lu	459
Model-based Software Development for Automatic Train Protection System Haifeng WANG, Chunhai GAO, Shuo LIU	463
Study On Model-based Safety Verification of Automatic Train Protection System Haifeng WANG, Shuo LIU, Chunhai GAO	467
Parallel Adaptive Hybrid Genetic Optimization Algorithm and Its Application Aimin An, Xiaohong Hao, Guici Yuan, Chao Zhao, Hongye Su	471

Detection and Parameter Estimation of Multicomponent LFM Signals Based on Hilbert-Huang Hough Transform Yuan Ye, Li Qing-fu, Fu Ying	476
Design of Teleconference Camera Based on SOPC Sen Ma, Yuanyuan Shang, Junchan Du	480
Multi-objective Optimization of Powertrain Mounting Based on MATLAB SHI Wen-ku, FU Jiang-hua, YA Hao, TENG Teng	484
Finite Element Analysis of the Static and Dynamic Characteristics of Engine Rubber Mount SHI Wen-ku, CHEN Zhi-yong, YA Hao, TENG Teng	488
Finite Element Analysis of an Air Spring Concerning Initial Pressure and Parameters of Cord Fabric Layer Shi Wenku, Jiang Wan, Huang Ying, Yao Weimin, Ya Hao, Liu Zubin	492
Finite Element Modal Analysis for a Light Bus SHI Wen-ku, CHEN Zhi-yong, GUO Fu-xiang, SHEN Zhi-hong	496
Parameters Estimation for Multicomponent LFM Signals Using EMD Based Fractional Fourier Transform Yuan Ye, Li Qing-fu, Fu Ying	500
Author Index	504

2009 Asia-Pacific Conference on Computational Intelligence and Industrial Applications

(PACIIA 2009)

**Wuhan, China
28 – 29 November 2009**

**Volume 2
Pages 1-471**



**IEEE Catalog Number: CFP0948F-PRT
ISBN: 978-1-4244-4606-3**

Volume 2 Table of Contents

Main Conference Papers

The Research of Information Management System for Evaluating Admitting New Party Member in College Xiang Yiling	1
Study on Intrusion IPv6 Detection System on LINUX Zhang Yu.....	6
A Result of the Wireless Communication Jiemin Zhao.....	10
Analysis of the Wireless Communication Jiemin Zhao.....	14
Chaos of a class of Hopfield Neural Networks Wenzhi Huang, Yan Huang	18
A New Approach for DCT Coefficients Estimation and Super Resolution of Compressed Video Tao Lu, Chengdong Lan, Lingyan Lu	24
Research and Implementation of Part-of-Speech Tagging based on Hidden Markov Model Zhang Youzhi.....	27
An on-site calibration Technique for Line structured light 3D scanner Min Zhang, Dehua Li	31
Intelligent referee system in Robot-Soccer Games based on conditional event algebra Yanduo Zhang, Li Peng, Feng Min, Deng Chen.....	35
Context Modeling and Reasoning Based on Certainty Factor Qian Hao, Tao Lu.....	39
A Study on Vertical Velocity Profile with Extra Fine Sediment in Open Channel Changjun Zhu, Sha Li	43
Groundwater Quality Forecast Using ARMA and GM Model Changjun Zhu, Liping Wu.....	47
Application Research of Drama in College English Education of China Wei Jianfeng, Zhang Yingli, Mi Jun, Zhu Changjun	51

Scheme Design of Technology Improvement for Coal Mine Main Fan Qingdong WANG, Jianfeng WEI, Ruilan YUAN, Changjun ZHU	55
Design of Coal Mine Main Fan Performance Optimization Qingdong Wang, Deyong SHANG, Zhiyong Yan, Changjun ZHU	59
Water Content Influence on the Slip Zone Strength Meso-structure Research Shi Bei-Xiao, Su Hui, Zhu Chang-Jun, Chen Yun-SHeng, Li Ning	62
Performance Analysis of Look Strategies of DHT in NATed Environment CHENG Yin-bo, WEN Xiang-ming	66
Key Technique Research of Image Retrieval Based on Combination Feature YANG Yanping, WANG Lei	70
Water and Steam Control System of Petroleum Refinery Xiaoqiang Zhao, Zhengtian Zhao	74
Construction of the Electronic Commerce Security System Based on Internet Chunjiao Liu, Dongmei Liu, Yuhong Li, Ming Yang, Jin Zhang	78
An Ant Colony Algorithm Hybridized with Iterated Local Search for the QAP Mingping Xia	81
A Modified Ant Colony Algorithm with Local Search for Capacitated Vehicle Routing Problem Mingping Xia	85
Three-phase Synchronization adjustment and Control of High Voltage Circuit Breaker ZHANG Zhan, GUO Weina	89
An Approach on the Automatic Generation of Concept Weights for Test Items Ziguang Sun, Zengfang Zhang, Meng Wang, Qin Wang	93
Blind Source Separation in Noisy Environment and Applications in Satellite Communication Anti-jamming LIN Bo,ZHANG Bang-ning, Dao-shen GUO	97
Research on Intrusiveness Model of online Advertising based on Neural Network ZHU Fuxi, GONG Changsheng, YIN Zhiyi	101
Research and Application of Congestion Avoidance Algorithm Based on Receiver-driven in the Real-time Detection System Wang Guitang, Xin Huasheng, Chen Ping, Wu Liming, Zhu Jianlin	105
Classification Rule Mining Using Feature Selection and Genetic Algorithm Xin Li, Xu Qian, Ziqiang Wang	108

Study on the Relationship of Financial Intermediary and Economic Growth Based on Empirical Analysis of Hebei Jiangshan Guo, Dongmei Liu, Yuhong Li, Ming Yang	112
An effective neighbor peer selection mechanism for peer-to-peer networks Junqing Li, Shengxian Xie, Querke Pan, Huan Li, Kaizhou Gao.....	116
Time-sensitive access control model in P2P networks Junqing Li, Shengxian Xie, Querke Pan, Huan Li, Yuting Wang	120
A New Method for Image Segmentation Wang Guitang, Zhu Jianlin, Wei Qingchun, Xin Huasheng, Cao Peiliang	124
A Formal Framework for Data Mining Process Model Ding Pan	127
Energy-saving Ventilation Control System for the Machine Rooms Zhou Quan, Zhang Wei-gong, Zhang Yong-xiang	131
Research on Digit-Monitor-Oriented Electronic Map Zhiqing Zhu, Fuliang Li, Jieli Sun.....	135
Fast Method of Detecting Communities in Complex Networks Bin Liu, Jing Li	139
A Reflective Framework for Dynamic Evolution of Semantic Web Service Composition Zhang Fan, Ying Shi, Yuan Wenjie.....	144
Steady-state Output Controllability and Output Controllability of Linear Systems Dehui Qiu, Qinglin Wang, You Zhou.....	148
31P-MRS Data Analysis of Liver Based on Self-organizing Map Neural Networks Qiang LIU, Yan-hong MA , Ning WANG, Yi-hui LIU,Shao-qing WANG,Li-juan WANG, Jin-yong CHENG,Jie CHEN, Dong-yue YU	152
Incorporating Layer 3 VPN into Network Processor Based Security Gateway Yue-Lai, Shengli-Xie	155
A Millimeter Wave Broadband Receiver Li Xingguang, Chen Dianren, CuiWei, Li Guiying.....	159
A Frame for Mining Time-Space Rules from Distributed Transaction Database Feiyue Ye,Xiaofeng Xue,Jin Qian.....	162
Application of Ontology Based Reasoning in Risk Identification of Software Projects Guilan Shen, Deying Fang, Jianbin Chen.....	166

Implementation of a Tracking Mechanism of Executive Instance Information in SaaS Application Yichuan ZHANG, Deshuai WANG, Bin ZHANG, Ying LIU	170
Method of Class Recognition for the Bubbles Film Based on Back Propagation Neural Networks YU Yang, WANG Jiang-an, MA Zhi-guo, SHAO Cheng-ming	174
Video Noise Reduction Based on Motion Complexity Classification Chunting Yang	177
A Novel Perception based Image Categorization Algorithm Yuan Jia-zheng , Tian li-yan, Zhang Rui-zhe,Huang jing-hua.....	181
Fuzzy Evaluation on Administrators in Colleges and Universities Based on Improved Algorithm Limin Xu, Yonggang Zhao	185
Fuzzy Evaluation on College Teacher's Job Satisfaction Based on Improved Algorithm Limin Xu, Yonggang Zhao	189
A Synthesizable On-Chip Wormhole Router Zhe Zhang, Xiaoming Hu, Lili Cui	193
Data Mining for Real Estate Market based on GIS Technolgoy A Case Study in Shanghai, China Guang YANG and Gang QIAO	197
Custom Testing Procedure Hall IC Testing System Design Dawei Xu, Weigong Zhang, Kunbao Ma	201
A Particle Swarm Optimization Algorithm for Mandarin Speech Recognition Yang Liu.....	205
Fuzzy clustering algorithm based on PSO in Body shape analysis Yang Liu.....	209
An Improved Method for Feature Extraction of Mandarin Pronunciation Chunting Yang	212
A Fusion Algorithm for PAPR Reduction in OFDM System Jia Kejin, Zhang Xiaowei, Du Taihang.....	216
Research of the Wireless Communication Jiemin Zhao	220
Research and Application of Entropy in the Sequence Randomness Test Minyong Qi, Jinxin Dong.....	224

An Improved Graph-based Image Segmentation Algorithm Huang Jinghua, Zhang Jingzun, Wang Yujian, Huang Jinghua	228
A Fast KPCA-based Nonlinear Feature Extraction Method Jinghua Wang, Binglei Xie, Jiajie Xu, Haifen Chen	232
Research on Extension Evaluation Model of Knowledge-Based Decision-Making Support System Jiemin Ding,Wei Shen,Weibo Li.....	236
A Fuzzy Diagnostic Model for Trouble-Locating in PLC Control Systems ZHANG Gaoyu, NIE Feng, HUANG Duying, ZHOU Zhizhao	241
Solder Joint's Surface Recovery Based on Linear Hybrid Shape-from-shading Jiquan Ma	245
Efficient Two Dimensional Principal Component Analysis for Online Learning Weiya Shi	250
Detecting Low-Voltage Arc Fault Based on Lifting Multiwavelet Weiyang Zheng,Weilin Wu	254
Combining Different Visual Vocabularies with Different Sizes for Image Categorization Hui-Lan Luo, Hui Wei, Yuan Ren	258
An Optimization Ant Colony Algorithm for Composition of Semantic Web Services Kai YAN, Gang XUE, Shao-wen YAO	262
An Improved Group Signatures Scheme Based on Discrete Logarithm Problem Chengming Qi	266
Discovering Interesting Sequential Pattern in Large Sequence Database Wei Cui, Haizhong An.....	270
A Territorial Coordination Strategy for Multi-robot System Limei Jiang, Rubo Zhang, Chaolun Wang.....	274
A Hybrid Particle Swarm Optimizer Xiaoling Wu, Min Zhong.....	279
Bridge the Gap between Theory and Practice on Cluster Supply Chain Xiao Xue, Zhifeng Zeng.....	283
A Survey on Autonomic Computing Research Zhenxing Zhao, Congying Gao, Fu Duan	288

Research on the Inspection Period of Non-attended Power Substation by the Monte-Carlo Method Zhang Zhongyuan, Yang Bin	292
Analysis and Simulation of Conducted Interference in Three-Phase-In-One-Tank GIS Ji Liangyou, Huang Weihong, Huang Liangping, Xie Zhanghong, Zhang Zhongyuan, Shi Wei	296
License Plate Location based on Direction and Edge Information Qian Cui, Suihe Ge, Shujian Shi, Lin Wang.....	300
The Study of Thermal Pollution Disposal on The Deep Coal Mine Working Face Yongge Gao,Fuming Liu	304
A Method Based on Orientation Field for Skew Correction of License Plate Xiaojuan Ma, Renlong Pan, Lin Wang, Xiangjian He	308
Specification and Verification of SOC Using PTL Pengfei Zhang	312
Stable On-demand Multipath Routing for Mobile Ad Hoc Networks Shuo Wang, Qiao Li, Yule Jiang and Huagang Xiong	318
Improved Method to Realize the Multiplex Time-domain Interleaver Li Yanting, Si Lu, Xu Weizhang, Yang Zhanxin	322
Design and Simulation Inductive Setting for Electronic Time Fuze on Muzzle LI Bo, ZHANG Ya	326
End-to-End Rate Distortion Optimization for H.264/AVC in Error Prone Environment Xie Zhi-ping, Zheng Geng-sheng	329
Design and Implementation of SVPWM Servo Control System Based on FPGA Pang Haiyan , Xie Yun , Xiao Shanshan , Chen Bingcheng	333
The Research of Personalized Search Engine Based on Users'access Interest Xiang-dong Chen, Lin Huang	337
The Software Communication Architecture Specification: Evolution and Trends Guan Jianxin, Ye Xiaohui, Gao Jun, Liu Quan	341
Awareness Elements In Web Based Cooperative Writing Applications Yasir Muhammad, Shahida Jabeen, Aslam Muhammad, Martinez Enriquez A.M.	345
Design &Implement Spatial Analysis in MapGIS-IMS SOA Aissatou Diasse	349

Application of AHP Model to Evaluate the Urban Sustainable Development Hai-yang SHANG, Fang SU	353
Design of Privilege Management System Based on Attribute Certificate in Mobile Network Zhang Lei, Guo Shize, Zheng Kangfeng, Li Haitao, Zhang ZhenTao	357
The Effect of Transmission code and Safety code on SIL in Safety-Critical System M. Xu, X. H. Yang, F.C. Hua	361
The Retrieval System Based on Concept Extending Maoyuan Zhang, Ming Liu	365
A Framework for Distributed Incremental Intrusion Detection Based on SVM Yong-Xiang Xia, Zhi-Hua Hu, Zhi-Cai Shi	369
On Influence of Computer Modeling Technology on Architecture Design Digital Design of Phoenix International Media Center Chen Dan, Su Bo	373
Chinese Coreference Resolution with Ensemble Learning Wenbo Pang, Xiaozhong Fan	377
Boiler Drum Level controlled by Fuzzy Self-adapting PID Yue Wei-jie, Liu Yong-xin	381
Modeling and Application of Message-oriented Semantic Connection among Web Services CUI Hua, YING Shi	385
Quantum BP Neural Network for Speech Enhancement Fei Li, Guobiao Xu	389
An Adaptive Discrete Particle Swarm Optimization for TSP Problem Jing He, Dejia Shi, Li Wang	393
A Note of the Wireless Communication Jiemin Zhao	397
Implementation Of An Accurate Farsi Handwritten Digit recognition System On FPGA Marzieh Moradi, Mohammad Ali Poormina, Farbod Razzazi	401
OGY Control Fuzzification of Tow-Link Rigid Robot Arm Shima Alizadeh Zanjani, Amir Homayoun Jafari	405
A Fast Oversampling Orthogonal Method for the Discrete Two Dimensional S-Transform Computing Guodong Zhang, Changchun Chen, Donghong Sun	409

Hybrid Algorithm of Tabu Search and Integer Programming for the Railway Crew Scheduling Problem Guillermo Cabrera G., José Miguel Rubio L.	413
Multi-scale Morphological Filtering Method for Preserving the Details of Images GUAN Mingshan,REN Hong'e,MA Yan	417
The Research of Firewall Technology in Computer Network Security Xin Yue,Wei Chen,Yantao Wang.....	421
Multi-Modal Mining in Web Image Retrieval Ruhan He, Wei Zhan	425
The Properties of a Sort of Biorthogonal Bivariate Vector Wavelet Packets with regard to an Integer-valued Dilation Matrix Mingpu Guo, Zhimin Pan	429
Water Supply Reliability Assessment in the East River Basin of South China Runrun Zhang, Guangbai Cui	433
Researches into Two-direction Biorthogonal Wavelet Packets with Four-scale Dilation Qi Li, Hong-E Wu	437
The influence of Ecological Compensation on the sustainable development Fang SU, Hai-yang SHANG	442
Design of Synchronization System with Perfect Functions Zhang Haixia	446
The Fuzzy Neural Networks based on evolutionary programming LIU Fang.....	449
Super-Resolution for Compressed Video Based on DCT Side Information Lu Tao,Hu Ruimin,Lan Chengdong,Han Zhen,Wang Zhongyuan	453
Emoticon-based Text Steganography in Chat Zhi-Hui Wang,Chin-Chen Chang,The Duc Kieu,Ming-Chu Li	457
Identification of Chaotic Characteristic of Power Load Based on Lyapunov Exponents Aiju Chen,Jingjing Liu	461
USB-based Portable Outdoor Multi-function Tester Design Aiju Chen,Jingjing Liu	464
Analysis and Design of Distributed Firewall System in Campus Network Liu Xiaofei	468

Author Index..... 472