Contents:

JCIT: Editorial Board ................................................................................................................................... i
JCIT: Call for Papers & Special Issue ............................................................................................................. 1

< PART 1 >

Research on Join-development and Application of Regional Economy Based on Factor Analysis and Gravity Model .................................................................................................................. 1
Junhai Ma, Bing Zhang

Tibetan Web Pages Classification .................................................................................................................. 8
Guixian Xu

RAAH: Reliability Aware Adaptive Hopping Scheme on Time-varying Channel model in WSN ................................................................................................................................. 16
Shihong Duan, Yadong Wan, Zhiqiang Guo, Qin Wang

A Cooperative Bayesian-based Algorithm for Distributed Mobility Tracking... 26
Chak Fong Cheang, Jianping Wu

A Fast Computation Method for MUSIC Spectrum Function of MUSIC Algorithm in Any Circular Array ...................................................................................................................... 35
Zhengdong Du, Ping Wei, Shan Zhou, Qin He

The Relationship between Diversity and the Accuracy of Classifier Fusion Based on Choquet Integral ................................................................................................................................. 44
Huimin Feng, Xuefei Li, Aixia Chen, Bin WANG

Parameter Estimation of TDDM-BOC Signal Based on Linear Equation Algorithm ................................................................................................................................. 52
ZHANG Deyu, QIAN Bo

Stability Control of Flexible Joint Robot Based T-S Fuzzy Model Using Fuzzy Lyapunov Function ................................................................................................................................. 60
Bin Zhang

A Software Components Automated Testing System on Reconfigurable Routing Platform ................................................................................................................................. 69
Dongchao Ma, Zhibo Zhang, Yuanyuan Jia

Using Grey Prediction Model, OWA Operator and Fuzzy Group Decision-Making Method for Choosing Comprehensively The AdvertisementAgents... 77
Xiangrong Zhang, Qingliang Zhang
A Face Detection Algorithm Based on Skin Color and Template Matching........ 85
Ma Jianzhe, Zhang Yongmei

Research on Energy-Efficient Intelligent Method for WSN.................................. 94
Zhenjun Luo, Yingjiang Zhang, Zhangfan Pang

Applying Genetic Algorithm Operation Tree for Predicting The Total Phosphorus in A Reservoir................................................................. 103
Chia-Sheng Hsu, Li Chen, Tai-Sheng Wang, Yuan-Tung Hsu

Prediction Analysis for Short Term Load Based on GM(1,1) and TGARCH Error Correction Model in Smart Grid...................................................... 111
Xiaojia Wang

MA Long-bo, Z HANG Da-hong, LIU Zu-jun

An Optimal Mixed Batch Blending Method and Its Application in Chinese Herbal Medicine Blending................................................................. 126
Mingfeng Zhu, Jianqiang Du

A Novel Comprehensive Compensation Approach for Fiber Optic Gyroscope Temperature Drift by Gaussian Process Regression............................ 134
Zhikun He, Guangbin Liu, Xijing Zhao, Zhicheng Yao

Modeling of MIMO Frequency Selectivity Space-Time Correlation Channel. 143
Hua Li, Jianfang Shi, Qinghua Zhao, Juanping Wu

A Smoothing Newton Method Based on the Generalized Fischer-Burmeister Function for Variational Inequality Problem........................................ 151
Juhe Sun, Li Wang

The Non-equidistant Multivariable MGRM(1,n) Based on Background Value Constructing and Accumulated Generating Operation of Reciprocal Number .................................................. 161
Youxin LUO, Qiyuan LIU

Decision-Making Model for Multidimensional Analysis of Preference Based on Intuitionistic Trapezium Fuzzy Set...................................................... 169
Yuxun Liu

Financial Accounting Measurement Concept, Asset Specificity, and the Application of Fair Value to Ecotourism Enterprises ........................................ 176
Zhang Yongkui
Research and Application of Non-equidistant New Information GM (1,1) Model with Improved Initial Value ................................................................. 182
Yuehua Cai, Wujun Zeng, Wei Yue Xiao

A Supervised Linear Dimensionality Reduction Method for Face Recognition 189
Li Guo, Zhonglong Zheng, Jiong Jia, Haixin Zhang, Fangmei Fu

Effect of Gas Emission rate on Spontaneous Combustion Zone in Gob............ 198
YANG MING, CUI YAKAI, GAO JIANLIANG

Short-term Load prediction based on SVR with Particle Swarm Optimization 205
Fei Zhang

Electricity Consumption Prediction Based on Improved WMC-GA-CV-SVR. 214
Zheng Zhang, Shanlin Yang

Yongquan DONG, Ping LING, Qiang CHU

Proposition of A Knowledge Representation Method For Design Issues In Innovation ................................................................. 230
Yang XU, Alain BERNARD, Lian LIAN

The Non-equidistant Multivariable New Information MGRM (1,n) Based on New Information Background Value Constructing and Accumulated Generating Operation of Reciprocal Number ........................................ 238
Xiaoyi CHE, Youxin LUO, Qiyuan LIU

Evaluation on the E-business Efficiency of Tourism Enterprises ................... 247
Huang Haiyu, Ding Ling

Research and Application of FBG Sensing Layer ........................................... 255
Xiaoma Dong

A Modified Sensitivity Filtering Method for the Suppression of Checkerboards and Gray-Scale Elements.............................................................. 264
Yixian Du, De Chen, Yi Zhang, Zifan Fang
< PART 2 >

Adsorption Properties Simulation of Carbonized Wood Fiber Filter for Ultrafine Particles Emitted by Diesel Engine .......................................................... 272
Xiurong Guo, Danfeng Du, Yan Ma

Study of Polygon Cutting Based on Roulettes of The Planet Gear Trains ........ 281
Changjun Hu, Guoqing Zhang, Weibing Xu

Autonomous Learning Strategy Research for Mobile Robot ............................ 290
Jianxian Cai, Jingsong Yang

Fault Diagnosis of Power Transformers Using Transfer Function Method ...... 298
Lu Yan, LIN Guo-hui

Edge Extraction of Wood Image with Flaw Based on BP Neural Network ...... 307
Hongbo Mu, Dawei Qi, Mingming Zhang

Fault Diagnosis of Gearbox Using EMD and Rough Set ............................... 316
Liu Huiling, Pan Hongxia, Liu Xiaojuan

An Adaptive Target Detection Method in High-Resolution SAR Images .......... 324
Yang Li, Jianjiang Lu, Jiabao Wang, Lei Bao, Wei Li

A Method of Eliminating the Uneven Illumination Based on Texture Characteristic ............................................................ 332
Jiuling Li, Quanjie Gao, Xin Dai

Birefringence Analysis of Transparent Plastic Plate Based on Moldflow ........ 339
Shaofei Jiang, Hongwei Jiang, Jiquian Li

Identification of High-order Critical Speed for Rotor Bearing System ............ 346
Yucheng Zhao, Qiang Fu, Jianying Zhang

An Dynamic Token Ring Protocol for Underwater Acoustic Sensor Networks ........................................................................ 354
Guangyu Fan, Jian Li, Yang Zhao

Augmented LQG Method for Optimal Control of Ship Shaft-Generatorfor .... 362
Guichen Zhang, Ping Li

Research of Cylindrical Billet Center Position Measurement System Based on High Accurate Laser Ranging Method ............................................. 373
Qingyun Liu1, Tao Liu, Ying Cheng
The Development Mode of Marginal Oilfield Based on Jack-Up Production Platform with Oil Cabins

Dunqiu Fan

Reduction Effect of The Clapboard of Polyphenylene Oxide on Domino Effect Risk Caused by Fragments

Dongliang Sun, Guangtuan Huang, Juncheng Jiang, Mingguang Zhang, Zhirong Wang

The Research and Application of Vibration Measurement System

Zhanbin Meng

Research on Compliance Control for Cutterhead Driving System of Shield Machines

Ran Liu, Weidong Li, Jianzhong Sun, Wei Sun

The Prediction Model of Slips and Falls Probability Based on the Utilized Coefficient of Friction

Zhang Junxia, Cao Lin, Su Hailong, Wang Xinting

Ergonomic Design of the Elderly Walking Aid Appliance Based on Gait Analysis

Xinting Wang, Junxia Zhang, Hailong Su, Xifei Yang, Saisai Cao

The Research on the Innovative Enterprise Organizational Innovation Path Forming Based on Dynamic Perspective

WANG Peng, SHI Chun-sheng

Study on the Electromagnetic Waves Scattering about Mine Tunnels Wall

Shanhua Yao, Bin Du

Transfer Model of Employee’s Tacit Knowledge in Creative Enterprise

Wenhe Lin, Qinghua Lv

A Case Study on the Growth of New Century Tourism Group— From an Entrepreneurial Perspective

Fengzeng XU, Ling DING

Fiber Reinforced Polymers and R/C Jackets for Seismic Retrofitting of a Prototype Non-ductile R/C Structure

Marco Valente

Finite Element Calculation of Composite Material Plate with Wing Connection Hole

LI Cheng, ZHENG Yanping, ZHAO Huadong, TIE Ying
Study on Construction of a Class Three-level of Autocorrelation Sequence Pairs ......................................................... 475
JIN Huilong, CHEN Jiaxing, XU Chengqian

Stability Criterion of Discrete T-S Fuzzy System Based on Fuzzy Region Concept ................................................................. 481
Songtao Zhang

Wang Tatyue, Li Hongwei

A PSO-Based SVR Algorithm for Investment Prediction ......................................................... 496
ZHao Wenge

Progressive Transductive Minmum Mahanobis Enclosing Ellipsoid Machine .......................... 502
Zhenxia Xue, Guolin Yu

Optimal Design of VMCK High-Order BPF ............................................................................. 512
Liu YANG, Guoxin ZHENG, Qingfeng DING, Xing SUN

< PART 3 >

The Construction Wireless Sensor Network System Based on ZigBee Technology and CSMA Protocol ......................................................... 521
Zhou Yu, Zhisong Hou

High Speed Photodetector with Integrated Photodiode in the Optocoupler ..... 530
Tian Lei, Xinquan Lai, Yongrui Zhao, Chi Yuan

Analysis of Transcriptional Synergy between Upstream Regions and Introns in Genes of Yeast ........................................................................... 538
Dan Chen, Jun Hu

Multisource Images Adaptive Fusion Based on Double Density Dual-tree Complex Wavelet Transform ................................................................. 548
Guangqiu Chen, Yinhan Gao

Modeling and Performance Evaluation of ForCES Protocol: A Stochastic-Petri-Net-Based Approach ................................................................. 558
Quan Sheng, Chuanhuang Li, Weiming Wang
The Study Development on Exercise Improving Blood Vessels Endothelial Function’s Signal Mechanism
ZhouLiang, YANGZeYi .................................................................................................................. 570

Personalized Learning Instant Support Service
Wenfang CHEN, Mingfeng Su, Xiaoguang He, Yibo CHEN .......................................................... 578

An Approach to Potential Evaluation of Emerging Technology Commercialization with Intuitionistic Trapezoidal Fuzzy Numbers
Rui Lin, Hongjun Wang, Guiwu Wei .................................................................................................................. 588

A Novel Foreign Language Teaching Quality Evaluation Approach Utilizing Fuzzy Neural Network
Zheng Xiaomei ................................................................................................................................................... 598

Quantity Prediction of Pest Based on SVR Trained by Quantum-Behaved Particle Swarm Optimization
Zeng Xiaonan, Nie Ying .................................................................................................................................. 606

Study on the Clustering Functional Areas of Provincial Industry in China
Huang Tianwei, Shang Yu ................................................................................................................................. 613

The Baum-Welch Algorithm of Mixture Coupled Hidden Markov Model
Shiping Du, Houhui Huang, Yuming Wei ........................................................................................................ 620

Local Region Active Contours Based on Gauss Smoothing
Lei Chen, Mingqiang Yang, Da Chen, Kidyo Kpalma ......................................................................................... 628

Application of Least Squares Support Vector Machine in The Diagnosis of Lung Cancer
Tao Liu, Mingwu Chen, Lei Xian, Huafu Zhou, Jianji Guo ................................................................................. 635

Design and Implementation of Redo Function on Open Source Workflow Engine-Activiti
Shaomei Wu, Tao Lin, Ningjiu Tang, Zhiming Wu ............................................................................................. 642

Study On The Core Competence System of Business Tourist Attractions -- The Case Study of Hubei Province in China
Chen Su, Liu Rongzhi, Huang Tianwei .............................................................................................................. 650

Research on New Information Technology of Adult Education
LI Wei, LIU Yang ............................................................................................................................................... 658

A Text Summarization Algorithm Based On User's Comments
Wen Yuan, Cao Wei, Liu Yun, Lian Jie ........................................................................................................... 665
Adaptive Image Segmentation via Data Compression and Texture Features ... 673
Ning-Yu An, Chi-Man Pun

Fast Twin Parametric-Insensitive SVR Using Successive Over-Relaxation ...... 681
Weijie Chen, Yuanhai Shao, Zhijun Zhu

Research on Application of Nanotechnology Sensor in Automobile ............... 691
Ning Jianhua, Hai Zhengping, Liao Xiangyang

Research on Image Segmentation Algorithm Based on Orthogonal Nyström Algorithm in Target Recognition ................................................................. 698
Yulan Hu, Quan Zhang

An Algorithm for Influence-Zone Overlap Competition Indices...................... 705
Lei Kong, Xingang Kang, Hua Yang, Jiali Xie, Xinfeng Huang

Technological Capability Evaluation Model of Marine High-tech Industries in China Based on Borda and Fuzzy Comprehensive Method ......................... 715
LI Tuochen, DING Yingying

Revenue Sharing Contract for Multi-Echelon Supply Chains with Fuzzy Demand ................................................................................................................. 724
Shengju Sang

Modeling The Neolithic Settlements of Zhengzhou-Luoyang Area by Weights of Evidence ........................................................................................................ 735
Bi Shuoben, Qiao Wenwen, Yan Tingxia, Li Xiliang

Condition Assessment and Fault Diagnosis Algorithms for Power Transformer and Their Application ..................................................................................... 743
Ruirui Zheng, Baochun Wu, Min Li

Study on The Enterprise Mergers and Acquisitions’ Process Under The Core Competence’s Perspective ................................................................. 751
Huo Xiaoping

Study on Isolation and Purification of Antifungal Active Compoents of Bacillus Cereus A168 ................................................................. 758
Ya Zhang, Pin Su, Xiao Lan Liao

Automatic Theme Extraction for Marine Data Marts Using Semantic Web ..... 765
Feng-Jing Shao, Shun-Yao Wu, Jin-Long Wang, Chun-Yuan Tian

News Video Annotation by Fusing Multi-Modal Information ............................. 772
Shilin Zhang
Self-Adaptive PID Controller Integrated with RBFNN Identification Applied to Microwave Drying Process........................................................................................................... 779
Biao Yang, Jun Chang, Hezhou Su, Jinhui Peng, Shimin Zhang, Shenghui Guo, Libo Zhang, C. Srinivasakannan, Zilian Liu, Zhimin Li, Zhanyuan Cao

Discrete-Time Bulk-Service Geo/Geo/1 Queue with Delayed Multiple Working Vacations......................................................................................................................... 790
Jiang Cheng, Yinghui Tang, Miaomiao Yu

Sludge Compost Quality Evaluation Based on Improved Genetic Algorithm and Radial Basis Function Neural Network.................................................................................. 802
Jingwen Tian, Meijuan Gao, Chuichao Kong

How to Select Optimal K-value for K-anonymity Model........................................ 811
Liming Huang, Chao Zhang, Jinling Song, Guangbin Zhang, Shuxia Liu

Wood Adhesion Cell Segmentation Scheme Based on Image Thinning ............. 820
Zhao Lei, Ma Yan