

2019 6th International Conference on Systems and Informatics (ICSAI 2019)

**Shanghai, China
2-4 November 2019**

Pages 1-809



**IEEE Catalog Number: CFP1973R-POD
ISBN: 978-1-7281-5257-8**

**Copyright © 2019 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1973R-POD
ISBN (Print-On-Demand):	978-1-7281-5257-8
ISBN (Online):	978-1-7281-5256-1

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Content

Control and Automation Systems

Control System Theory

Adaptive Identification of Lorenz Chaotic System Using a State Variable <i>Xiping Sun, Wen Yuanxiong, Chen Wenyuan</i>	1
Application of Wavelet Soft Threshold Denoising Algorithm Based on EMD Decomposition in Vibration Signals <i>Biao Sun, Shaoping Zhou, Congyi Wang</i>	7
Design of Permanent Magnet Synchronous Motor Speed Controller Based on Adaptive Back-Stepping Theory <i>Jing Lv, Xiaojin Fu</i>	12
Finite-time Outer Synchronization Under Unbounded Delays <i>Xiwei Liu, Han Zhang</i>	17
Optimal Scheduling of Combined Wafer Fabrication Equipment Taking Mechanical Arms as Buffers <i>Junqing Sun, Yilin Wang, Meiling Feng, Bin Sun</i>	23
Principle and Simulation analysis on Direct Torque Control in Permanent Magnet Synchronous Motor <i>Shaopeng Li, Yuan Xie, Kai Zhang, Yaoting He</i>	28
Sensorless control of permanent magnet synchronous motor based on adaptive sliding mode observer <i>Tianyu Bai, Jun Liu</i>	33
Stability Region Design of Fractional Complex Order $PI^{\lambda}+PI^{\mu}$ Controller Based on D Segmentation <i>Min Zheng, Huang Tao, Guangfeng Zhang, Daxing Zhong</i>	39
Using EZDA Approach to Handle Original ZG Control Failure for TVNS Systems Output Tracking due to States Tending to Infinity <i>Yunong Zhang, Nini Shi, Min Yang, Jinjin Guo, Yihong Ling</i>	44
Vector Control of PMSM Based on Proportional Resonance Control <i>Kai Zhang, Yuan Xie, Shaopeng Li, Yaoting He</i>	51

Control System Applications

A Straightness Control System for Motor Shaft Straightening with the Stroke Prediction Algorithm <i>Yue Zang, Hong Lu, Yongquan Zhang, Essa Alghannam, Zexing Guo</i>	57
Adaptive Dual-Drive Synchronization Control Strategy <i>Qian Cheng, Hong Lu, Essa Alghannam, Zhi Ling, Jiafu Xue</i>	63
Automated Traffic Signal Performance Measures: Features and Applications <i>Yunpeng Zhang, Liang-chieh Cheng, Fengxiang Qiao, Anish Patel</i>	70
Design of Controller for Linear Motor Servo System <i>Shengju Li, Xiaoming Ren</i>	76
Design of Crane Anti-swing Controller Based on Differential Flat and Linear Active Disturbance Rejection Control <i>Lin Chai, Huikang Liu</i>	81
Geometric Error Modeling and Compensation of the Dual-driving Feed Worktable <i>Yongfei Yang, Hong Lu, Meng Duan, Qi Liu, Yifan Xu</i>	86
Influence of Noise Frequency on Secondary Sound Source Layout for a Duct Active Noise Control System <i>Xin Tian, Shaoping Zhou, Cangtian Leng</i>	92
Multi-Voltage Vector of Duty Cycle Model Predictive Current Control for Permanent Magnet Synchronous Motor <i>Baoshuang Guo, Aiyuan Wang, Heng Li, Yanchun Zhang</i>	98
Regionalization Intelligent Garbage Sorting Machine for Municipal Solid Waste Treatment <i>Hongyi Luo, Jiming Sa, Ruibin Li, Jin Li</i>	103
Ship Course Tracking Control Based On Single Neuron Adaptive PID <i>Xingwu Wang, Zheng Huang, Jialun Liu, Xuming Wang</i>	109
Human-Machine Interface	
A New Method to Improve Identification of Lumbar Electromyography Signals during Asymmetrical Flexion/Extension Tasks <i>Wang Qi, Wang Qingming</i>	114
An Expression Recognition Method on Robots Based on MobilenetV2-SSD <i>Fei Zhang, Qi Li, Yushu Ren, Huixin Xu, Yu Song</i>	118

Design of Virtual Interaction Experience Based on Multi-signal Extraction of Lower Lumbar Muscle <i>Wang Qi, Wang Qingming</i>	123
---	-----

Computer Vision

A visual relocation algorithm with illumination changing robustness <i>Duo Xu, Qingxuan Jia, Ping Ye, Hanxu Sun</i>	127
An Active Vision Based Localization and Mapping Method for MAV Inspection in Visual-degraded Restricted Environment <i>Mingxuan Zhou, Fuqiang Zhou</i>	133
An improved YOLOV3 for Pedestrian clothing detection <i>Ruyue Liu, Zhijie Wang, Zeyu Yan, Shenyi Ding</i>	139
Driver Fatigue State Detection Based on Facial Key Points <i>Nana Zhang, Hui Zhang, Jun Huang</i>	144
Pedestrian Re-identification Based on Head Detection and Region Alignment <i>Yu Han, Xiaodong Cai, Yuelin Chen, Yi Cao</i>	150
Smoky Vehicle Detection Algorithm Based On Improved Transfer Learning <i>Guangming Zhang, Dexiong Zhang, Xiaobo Lu, Yichao Cao</i>	155

Robotics

An improved scan matching algorithm in SLAM <i>Hongkai Zhang, Niansheng Chen, Guangyu Fan, Dingyu Yang</i>	160
Optimal Path Planning Based on Hybrid Genetic-Cuckoo Search Algorithm <i>Junrui Wang, Xiang Shang, Ten Guo, Jinchao Zhou, Sining Jia</i>	165
SUBOPTIMAL ASSIGNMENT WHEN CREATING A FORMATION OF MOBILE OBJECTS <i>Alexander Karkishchenko, Viacheslav Pshikhopov</i>	170
The Manipulator Path Planning of Bolt Disassembly Based on Improved Genetic Algorithm and A* Algorithm <i>Weixin Zhang, Shaojun Wang, Hong Lu, Mingtian Ma, Cong Kong</i>	176

Other Topics in Computer Control and Robotics

A multi-sensor based federated kalman filter integrated navigation system	
---	--

<i>Qingxuan Hu, Tongyue Gao, Fengshou Zhao, Dongying Gao, Shaoshan Shi</i>	183
A PDR-Assisted and INS-Integrated Navigation System for Pedestrians <i>Fengshou Zhao, Tongyue Gao, Qingxuan Hu, Dongying Gao, Shaoshan Shi</i>	189
Storage Allocation Algorithm with Multi-Objective Optimization in High-Density Tridimensional Warehouse <i>Qiubo Huang, Shuda Xie, Guohua Liu</i>	195

Power and Energy Systems

Modeling, Control and Diagnostics of Power Systems

Analysis and Suggestions on Peak Shaving of Hunan AC-DC Hybrid Power Grid with Large-scale New Energy <i>Meng Xiang, Min Tan</i>	202
Application of an Improved Lagrangian Interpolation Prediction Method in Continuous Power Flow Calculation <i>Xiaoteng Li, Jinqun Zhao, Xiaojian Zhao, Jing Xu</i>	209
Design and Operation of Low Speed and Direct Drive of Single-Phase Generator <i>Aiyuan Wang, Yanchun Zhang, Baoshuang Guo, Heng Li</i>	213
Fault Analysis of Wind Turbine Gearbox Based on Vague Set and Fault Tree <i>Hongyan Zhu, Hongyan Zhu, Xiaojin Fu</i>	218
Low-Frequency Oscillation Mode Identification with OpenPDC Platform <i>Jian Zuo, Jihong Tang, Hu Guo, Dijun Hu, Keren Zhang</i>	223
Prediction of spindle bearing temperature rise and brake wear of wind turbines based on kalman wavelet neural network <i>Menglin Tao, Zhijie Wang, Hong Wang, Mingli Yang</i>	228
Subsynchronous oscillation suppression measures for doubly-fed wind turbine based on eigenvalue analysis method and correlation factor method <i>Zhiyu Zhang, Hong Wang, Zhijie Wang, Guodong Ding</i>	234

Fuel Cells and Electrical Vehicles

Power Electronics

A Pre-synchronization Method for Grid-connection Based on Virtual Synchronous Generator	
---	--

<i>Wenqiao Tang, Liu Jun</i>	239
Application of an Improved Continuous Power Flow Method in Voltage Stability Analysis	
<i>Xiaoteng Li, Jinquan Zhao, Hang Liang, Jing Xu</i>	244
Investigation of Low Dynamic Ron on GaN/AlGaIn/GaN HEMT by Field Plate Using Physical TCAD Simulation	
<i>Hemanth Atluri, Manoj Kumar Reddy Thunga, Jhansi Lakshmi Chennayyagari, Hemanth Kumar Bhajantri, Lavanya Bandi</i>	249
Physics Based TCAD Simulation and Calibration of GaN/AlGaIn/GaN HEMT Device	
<i>Manoj Kumar Reddy Thunga, Jhansi Lakshmi Chennayyagari, Hemanth Atluri, Hemanth Kumar Bhajantri, Lavanya Bandi</i>	253
State-of-charge Estimation of Batteries Based on open-circuit voltage and time series neural network	
<i>Jianhua Li, Mingsheng Liu</i>	257
Wind, Solar and Nuclear Energy	
Deposition High Quality P-type Microcrystalline Silicon Thin Films by RF-PECVD	
<i>Qunchao Guo</i>	263
Design of the Wind Turbine Simulation System Based on Fuzzy Control	
<i>Juping Gu, Bangbang Meng, Haofeng Ren, Jianhong Zhu, Zeyu Chen</i>	268
Dynamic Reconfiguration of Distribution Network Considering Time-varying Characteristics of DG	
<i>Heng Li, Aiyuan Wang, Yanchun Zhang, Baoshuang Guo</i>	274
Optimization of Energy Storage Configuration for Error Compensation of Wind Power Prediction	
<i>Haobo Li, Hairong Zou, Jianhong Zhu</i>	280
The Coordinated Control Strategy of Doubly-fed Induction Generators With an Energy Storage Dynamic Voltage Restorer for Low Voltage Ride Through	
<i>Shengwei Qu, Hong Wang, Zhijie Wang, Zhanhui Li, Zeyang Pei</i>	286
Smart Grids and Power Management	
Agents Based Service Restoration in Electrical Secondary Distribution Network	
<i>Rukia Mwifunyi, Nerey Mvungi, Mussa Kissaka</i>	292

An Energy Management System Based on Cloud Architecture <i>Bo Peng, Xin Li, Fangjian Shang, Yao Wang, Wenfeng Tian</i>	297
Combination of Microsources and Optimization Capacity Configuration in Microgrid <i>Peizhen Xu, Yonggeng Lu</i>	302
Design of distributed current quality monitoring system <i>Junping Luo, Liqun Han, Lulu Yuan</i>	308
Design Scheme of Electric IoT Wireless Private Network <i>Wenfeng Tian, Xin Li, Fangjian Shang</i>	314
Energy Management Mode of the Photovoltaic Power Station with Energy Storage Based on the Photovoltaic Power Prediction <i>Shanshan Shi, Yu Zhang, Chen Fang, Yufei Wang, Anan Ni</i>	319
Energy Management Strategy for Maximization of Renewable Energy Consumption in Multi-microgrids <i>Wei Jiang, Kaixu Yang, Junjie Yang, Naifan Xue, Zhuhan Zhuo</i>	325
Involvability Analysis of Power Distribution Network Based on Topology Structure <i>Liang Wang, Ke Lin, Wei Zhang, Liangzhong Fan</i>	330
Two-Stage Optimized Dispatch Strategy of AC/DC Hybrid Microgrid under Uncertainty <i>Zuhan Zhuo, Junjie Yang, Fengye Hu, Kaixu Yang, Naifan Xue</i>	335
Web-based Smart-grid Energy Management System <i>Haesung Tak, Dayoung Lee, Hee-je Kim, Hwan-gue Cho</i>	340
 Other Topics in Power and Energy Systems	
Ammeter Inspection With Densely Connected Object Detection Network <i>Hong Yan, Zhiqiang Jiao, Muwei Yang, Qiang Wang, Ning Yang</i>	345
An electromagnetic and piezoelectric coupled energy harvester using cantilever beam for low frequency vibration <i>Zihua Wang, Guangpu Li, Tao Yao</i>	350
Influence of Contact Circuit of Magnetic Latching Relay on Magnetic Latching Force <i>Xiaoyue Wang, Xiuping Su</i>	355
Investigation of Last Resort Service in Overseas Retail Electricity Market and Suggestion to Domestic Provincial Retail Market <i>Yongbo Li, Hanhan Qian, Jing Li, Zhemin Lin, Kai Wang</i>	360

Marine renewable energy based on the principle of Magneto Hydro Dynamical power generation <i>Qiuyingzhu Yongguoli</i>	365
Outlier Detection for Transformer's Oil Chromatographic Data Based on Metric Learning and the Weighted Local Outlier Factor <i>Jiafeng Qin, Yi Yang, Zijing Hong, Hongyi Du, Chao Gu</i>	370
Splitting Method and Realization of Communication Network for Intelligent Meter Reading in Station Area <i>Ning Li, Jinchen Yang, Na Li, Yinpin Bai, Huimin Hu</i>	376
Study of wave energy harvesting technology based on pendulum and spring vibration pick-up mechanism <i>Zhijia Wang, Guangzhen Wang, Tao Yao</i>	382

Intelligent Systems

Pattern Recognition

Age-invariant Face Recognition Based on Sample Enhancement of Generative Adversarial Networks <i>Siyao Chen, Dongping Zhang, Ping Chen, Li Yang</i>	388
An Improved Fuzzy Multi-class Twin Support Vector Machine <i>Hongmei Ju, Ling Jing</i>	393
CT Images Classification of Hepatic Hydatid Disease by Different Methods <i>Nadiya Abududikeyim, Zhijia Liu, Chuanbo Yan</i>	398
Enhanced Sparse based Discriminative Topic Representation for Text Categorization <i>Wenbin Zheng, Wenxu Zhang, Xi Yue, Yan Gao, Hong Tang</i>	404
Fuzzy Comprehensive Evaluation of Technical Economy of Static Synchronous Series Compensator Based on BP Neural Network <i>Yan Lu, Hongjian Li, Ke Lv, Shouqiang Fu, Min Yu</i>	409
Image Classification with Fisher Feature Analysis <i>Peixuan Qin, Jun Chu, Yawei Su</i>	414
Pedestrian Detection and Tracking Based on 2D Lidar <i>Jiannan Chen, Ping Ye, Zhipeng Sun</i>	421

POLAR: Posture-level Action Recognition Dataset <i>Wentao Ma, Shuang Liang</i>	427
Robust face recognition method based on similarity fusion <i>Dai Huang, Xiaodong Cai, Yuelin Hu, Yuzhu Liu</i>	434
Speech Recognition Based on Genetic Algorithm Optimized Support Vector Machine <i>Yonghui Wang, Haiye Hu</i>	439

Agent and Autonomous Systems

Joint Wideband Spectrum and DOA Sensing With Co-prime Arrays Based Using Sub-Nyquist Samplers <i>Wanghan Lv, Lin Xu, Wei Wu, Yinghe Wang, Huali Wang</i>	445
---	-----

Knowledge Engineering

Extraction of emotion words and construction of emotion dictionary based on syntactic dependency and point mutual information <i>Chunfang Yuan, Guofeng Deng, Xiaokao Tan</i>	450
Interpersonal Ties and the Social Link Recommendation Problem <i>Song Ji, Jiamou Liu</i>	456

Computational Intelligence

A Damped Newton Algorithm for Nonnegative Matrix Factorization Based on Alpha-Divergence <i>Takehiro Sano, Tsuyoshi Migita, Norikazu Takahashi</i>	463
A Percentile Ant Lion Optimizer Algorithm applied to the Knapsack problem <i>Matias Valenzuela, Lorena Jorquera, Gabriel Villavicencio, Paola Moraga, Hernan Pinto</i>	469
Dynamical Analysis and Multistability in a Neuronal System with Discrete and Distributed Delays <i>Zigen Song, Bin Zhen</i>	475
Optimization of acoustic countermeasure strategy for convoy ship formation <i>Yingchun Chen, Yinghua Guo, Kaiming Wu</i>	481
Research on Data-Driven Optimization Based on RF Surrogate <i>Yuan Zheng, Xiaogang Fu, Yanwen Xuan</i>	487

Artificial Intelligence

A Human-in-the-Loop Method for Developing Machine Learning Applications <i>Li Yang, Menghan Li, Jianlong Ren, Chun Zuo, Jiajia Ma</i>	492
A Semi-supervised Knowledge Assessment Paradigm Based on T-CNN Algorithm for the Industrial Massage System <i>Sheng Wang, Jinkuan Wang, Yinghua Han, Qiang Zhao</i>	499
An Improved Incremental Structure Learning Algorithm For Bayesian Networks <i>Haoran Liu, Zhaoyu Su, Yongji Liu, Liyue Zhang, Rongrong Yin</i>	505
An Lipreading modle with DenseNet and E3D-LSTM <i>Chongyuan Bi, Dongping Zhang, Ping Chen, Jun Ge, Xiangxiang Zhu</i>	511
Application of Logistic Regression with Fixed Memory Step Gradient Descent Method in Multi-Class Classification Problem <i>Yuan Sun, Zan Yang, Zhihao Zhang, Dan Li</i>	516
Application of U-Net with Variable Fractional Order Gradient Descent Method in Rectal Tumor Segmentation <i>Bohan Wei, Zan Yang, Yangying Jiang, Wei Nai, Dan Li</i>	522
Automatic textual Knowledge Extraction based on Paragraph Constitutive Relations <i>Zuquan Peng, Huazhu Song, Baihan Kang, Oloulade Babatounde Moctard, Miao He</i>	527
Dendritic Branches of DNM Help to Improve Approximation accuracy <i>Jiaxin He, Jingyao Wu, Yuan Guangchi, Yuki Todo</i>	533
Dendritic Neuron Model and Its Capability of Approximation <i>Fei Teng, Yuki Todo</i>	542
Dense High-Resolution Siamese Network for Weakly-Supervised Change Detection <i>Xinyu Jiang, Huiming Tang</i>	547
Dual Universes Multi-Granulation Covering Rough Sets Model <i>Zhijia Wang, Qinghai Wang</i>	553
Fall detection and recognition based on GCN and 2D Pose <i>Yin Zheng, Dongping Zhang, Zhihong Zhou, Li Yang</i>	558
Multi-stage Real-time Human Head Pose Estimation <i>Xiangwei Zhang, Dongping Zhang, Ping Chen, Jun Ge, Kui Hu</i>	563
Pedestrian Tracking Algorithm for Dense Crowd based on Deep Learning <i>Ge Yang, Zihao Chen</i>	568

Quality Evaluation Algorithm Based on AHP and Utility Theory <i>Ge Yang, Linbo Wang</i>	573
Road sludge detection and identification based on improved Yolov3 <i>Jun Ge, Dongping Zhang, Zhihong Zhou, Li Yang, Chongyuan Bi</i>	579
Selective Ensemble Modeling Method Based on Random Vector Functional Link Network and Game Theory <i>Shuangye Chen, Jianchen Gao, Hanguang Fu, Rong Zhao</i>	584
The dendritic neuron model is a universal approximator <i>Jingyao Wu, Jiaxin He, Yuki Todo</i>	589
Transformer Image Recognition System Based on Deep Learning <i>Yu Xu, Tao Jin, Yunjong Xu, Xiaofeng Shi, Shengke Chen</i>	595
Intelligent System Applications	
A LBS Method for Student Behavior Based on Hybrid Positioning by using big data Analyzation <i>Xiong Li, Shuna Yan, Yiming Shao, Jiangtao Hao</i>	600
A Survey on Fuzzy Soft Set-Based Decision Making and Parameter Reduction <i>Xiuqin Ma, Yanan Wang, Hongwu Qin, Jin Wang</i>	606
Collaborative Recommendation for Scenic Spots based on Degree Centrality <i>Jinlong Chen, Yiming Jiang, Minghao Yang</i>	611
Digital instrument identification based on block feature fusion SSD <i>Jinbo Fang, Mingxian Guo, Xusheng Gu, Xiuying Wang, Shoubiao Tan</i>	616
Fundamental Issues in the Design of Smart Home for Elderly Healthcare <i>Vangalur Alagar</i>	621
Genetic Algorithm to the Split Delivery Vehicle Routing Problem <i>Zhao Gao, Guohua Sun, Zhenglei Yuan</i>	626
Integrating Harmony Search Algorithm and Deep Belief Network for Stock Price Prediction Model <i>Lei Zhang, Xiangqian Ding, Ruichun Hou, Ye Tao</i>	631
Intelligent Fan System Based on Big Data and Artificial Intelligence <i>Zhihe Yang</i>	637

Multi-Function Tibetan Input Method on Android <i>Yuanyuan Chen, Weilan Wang, Tiejun Wang, Caike Zhaxi</i>	643
Multi-parameter double fuzzy decoupling PID algorithm for pig breeding system <i>Jun Tu, Bo Liu, Haojie Wang</i>	649
Research on Multi-destination Delivery Route Optimization of Unmanned Express Vehicles <i>Shushang Chi, Pengying Du, Jingjing Huang</i>	655
Study for Intelligent Luggage Following System Based on Near Field Bluetooth Technology <i>Mack J. Du</i>	660
The application of a new fuzzy soft set parameter reduction method in the evaluation of scientific research results <i>Xiuqin Ma, Huifang Li, Hongwu Qin, Qinghua Fei, Zhuangyun Gong</i>	665

Computer Systems and Applications

Other Topics in Intelligent Systems

Detecting hate speech from tweets for sentiment analysis <i>Lin Jiang, Yoshimi Suzuki</i>	671
Research on Location Problem of Distribution Center for Agricultural Products <i>Yang Aimin Yang, Liu Jie Liu</i>	677

Distributed Systems, Grid Computing, Cloud Computing, and

Services Computing

A Quadratic Permutation Polynomials Enhancement of a RLNC Approach in MANETs <i>Chengli Huang, Baolin Sun, Ying Song, Chao Gui</i>	683
Cloud Resource Scheduling Method Based on Hybrid Particle Swarm Optimization <i>Xudong Li, Dong Zhang, Dingkun Chu</i>	688
Constructing of vulnerability prevention secure model for the cloud computing <i>Ching-chiang Chen, Chia-nan Wang</i>	694
Energy Efficiency Test and Model Construction Based on FPGA cloud platform <i>Yi Liu, Ning Xu, Wufeng Wang</i>	699

Machine Learning Driven Network Routing <i>Kun Yu, Lizhuang Tan, Xiaojin Wu, Zhiyong Gai</i>	705
---	-----

Overview of Cloud Computing Resource Allocation and Management Technology <i>Weijin Zhuang, Huang Longda</i>	713
---	-----

Parallel Computing

Real-Time and Embedded Systems

Simulation SPI+FLASH system based on FPGA <i>Xiuli Yu, Bingqi Li</i>	719
---	-----

VLSI

An SoC for Qi-compliant Wireless Power Transmitter With Enhanced EMI Performance <i>Xinchao Zhong, Chiu-wing Sham</i>	725
--	-----

Nanocomputing and Nanomaterials

Computers in Industry and Manufacturing

Process Visualization System using Smart Tags <i>Satoshi Nakata, Mitsuyoshi Horikawa, Azuma Okamoto</i>	729
--	-----

Research on the factors that affect customers' purchase intention on Crowdfunding platform <i>Yung-hsin Lee, Shui-lien Chen, Tzu-ju Chang, Yu-chieh Chen</i>	735
---	-----

Computers in Education and Learning Technologies

A Scoring System of Oral English-Chinese Translation Based on Frame Semantic Analysis <i>Xinguang Li, Xiaolan Long, Yan Long, Chuhua Liang</i>	742
---	-----

Design and Development of Feedback System in Martial Arts Skill Teaching <i>Xiaoyu Wang, Zhiyong Chen, Zhang Yao</i>	748
---	-----

Quality Evaluation and Key Defects Correction for Handwritten Chinese Characters <i>Weihua An</i>	752
--	-----

Computers in Aerospace Engineering

Computers in Biomedical Engineering and Biotechnology

- Detecting Vertebra Landmarks From Ultrasound Image Using Single Shot MultiBox Detector
Qifeng Deng, Qinghua Huang.....757

Computers in Transportation

- Foreign Object Detection Between PSDs and Metro Doors Using Deep Neural Networks
Weiming Liu, Yuan Dai, Haiyu Li, Lan Liu, Lin Zhong.....762
- Foreseeing Congestion using LSTM on Urban Traffic Flow Clusters
Ziyue Wang, Parimala Thulasiraman.....768
- Person Movement And Stay Classification Based On Base Station Network Data
Ke Wang, Shaoyang Zhang, Kun Yu, Ying Li, Weike Fan.....775

Computers in Oceanic Engineering

- Influence on the Vertical Coherence of Transfer Function by Types of Sound Speed Profile in Shallow Water Waveguide
Yinghua Guo, Yingchun Chen, Xinning Chen, Yali Qi.....783

Computational Sciences and Engineering

- Community-based Network Immunization Strategy
Wei Yang, Li Zhang, Teng Chen, Yu Yao.....788
- Volatility Inversion and Empirical Analysis on Hang Seng Index Option
Xu Xu, Zuoliang Xu, Jun Suo.....794

Scientific and Engineering Modeling and Simulations

- Analysis of a Virtual Optical Encryption Holographic System
Yang Peng, Tomoyuki Nagase.....799
- Secure load-balanced scheme for cluster-based WSNs
Jiliang Zhou, Ziqiang Lin, Xi Jiang.....804
- Task Assignment Based on the Dynamic Alliance Formation Game
Yang Wu, Bin Li, Yu Zhou, Yonglong Zhang.....810
- The Formal Mechanism of the UML Model Based on SBOPN
Xiaoling Yao.....816

The Influence of Time-delay for the Bifurcation of Fractional Neuron Network <i>Min Zheng, Guangfeng Zhang, Daxing Zhong, Tao Huang</i>	821
--	-----

Computer Applications in Other Areas

Abstract Model Based on Location Attention and Competition Mechanism <i>Peng Jiang, Yuelin Chen, Fei Qin, Xiaodong Cai</i>	827
---	-----

Adaptive Hybrid Projective Models for Aerial Video Stitching <i>Runping Xi, Tianyi Han, Yaqing Zhang, Qianqian Han</i>	832
---	-----

Algorithm Research Based on Labels of Scenic Spots <i>Jinlong Chen, Junwei Hu, Minghao Yang</i>	839
--	-----

Application Research of two-dimensional code in mobile augmented reality <i>Mengde Zhao</i>	845
--	-----

Depth Learning Method of Many Light Rendering based on Matrix Row and Column Sampling <i>Genyuan Zhang, Fanzhi Kong</i>	849
--	-----

Eye Focus Detection Based on OpenCV <i>Lina Shang, Cui Zhang, Haozheng Wu</i>	855
--	-----

Feature Selection Based on Neighborhood Entropy for Data Hiding Analysis <i>Yanqi Xie, Yumin Chen</i>	859
--	-----

Forecasting of Vegetable Prices using STL-LSTM Method <i>Dong Jin, Helin Yin, Yeonghyeon Gu, Seong Joon Yoo</i>	866
--	-----

Improve crowd size estimation by leveraging deformable convolutional neural network and deformable region of interest <i>Lubamba Kasangu Eric, Keyang Cheng, Rabia Tahir, Mohammad Saddam Khokhar</i>	872
--	-----

Intrusion object recognition and space distance measurement in safety area of high voltage transmission lines <i>Liu Ting, Liu Yan, Liu Kai, Xiao Bin, Chen Jian</i>	878
---	-----

The Outlier Elimination of Trajectory Data Based on Kernel Adaptive Filtering with Variable Step Size <i>Zhen-xing Li, Bi-yan Zhang</i>	884
--	-----

Other Topics in Systems

Other Topics in Systems

A Deadlock Prevention Algorithm for Two-Phase Locking Protocol Based on Petri Nets <i>Xiaoling Yao</i>	889
A New Method for Detecting Radar Target Electromagnetic Spectrum Shift <i>Jun Han, Minghao He, Xiaojie Tang, Yuwen Tang</i>	893
Adaptive alternating current transcranial electrical stimulation (tACS) <i>Dong Guo, Huiyan Li, Minghui Sun</i>	898
An adaptive transcranial direct current stimulation (tDCS) <i>Minghui Sun, Huiyan Li, Dong Guo</i>	903
Analysis of An Human Body Communication Channel Model Based on Various Path Length <i>Songyue Hou, Wei Liao, Ziyang Wang</i>	909
Comparing the Performance the Vibratory Roller Cab's Isolation Mounts with Optimal Control Methods <i>Beiping Zhang, Nguyen Vanliem</i>	915
Design of Test Fixture for High Speed Connector <i>Xueyan Lin, Jiahui Li, Yuechang Wang</i>	921
Diagnosis Methods for Inter-turn Short-circuit Fault Degree of Permanent Magnet Synchronous Motor Stator Winding <i>Yanchun Zhang, Aiyuan Wang, Baoshuang Guo, Heng Li</i>	927
Improved Access Control Decision Diagrams for ABAC Policy Evaluation and Management <i>Luo Xiaofeng, Sen Wang</i>	932
Investigation and Analysis on Lightning Protection Maintenance Schemes of High-Speed Rail Catenary Abroad and Their Reference Significance for China <i>Wei Nai, Yangzhi Hu, Dongfan Qian, Yidan Xing</i>	938
New 5-Step Discrete-Time Zeroing Neuronet for Time-Dependent Matrix Square Root Finding <i>Xiao Liu, Chaowei Hu, Xiangui Kang, Mingzhi Mao, Yunong Zhang</i>	943
Odd-even Extraction Method of the Continuous Outliers Elimination of Trajectory Data <i>Xiao-wei Dai, Shu-yuan Zhao, Zong-jia Wu</i>	950

On Pricing Problem of Two-Channel Reverse Supply Chain Considering Consumer Psychology under "Internet +" Environment <i>Yi Chen, Bin Sun, Meiling Feng, Junqing Sun</i>	955
---	-----

Research on similarity measurement method of statistical sorting region based on differentiation and location information <i>Xiaobing Chen, Zhijie Lin</i>	961
---	-----

Solving for inverse-like dynamic matrices of variables and derivatives using Zhang neural dynamics (ZND) equivalency <i>Jianrong Chen, Mingzhi Mao, Yunong Zhang</i>	967
---	-----

Communications and Networking

Ad Hoc and Sensor Networking

A framework design of Smart trash cans management system <i>Chuqiao Jiang, Niansheng Chen</i>	973
--	-----

Wireless Networking

A variable rate real-time unidirectional video transmission system based on embedded system <i>Lin Ge, Laixian Peng, Lei Zhang, Aijing Li</i>	978
--	-----

Mission Policy and Optimization Objectives in Cognitive Emergency Communication Networks <i>Xue Ji, Jiajun Chen, Shibing Zhang, Xiaoge Zhang</i>	984
---	-----

Wireless Communications

Quasi-coherent Detection Technology for OFDM-DAPAK Based on Low-dimensional Kalman Filter <i>Guopei Lv, Juan Wu, Yuelei Xie, Ouyang Shan</i>	989
---	-----

Security analysis of a relay selection system under outdated CSI <i>Cheng Gong, Xianyi Rui</i>	995
---	-----

VLSI Architecture of 36-Mode Reconfigurable FFT Hardware Chip with Newly-Developed 2D-FIFO Arrangement Structure <i>Xin-yu Shih</i>	999
--	-----

Internet and Web Systems

A Social platform for Music: learning and making compositions through collaboration and social interactions

Alfonso Guarino, Delfina Malandrino, Luca Peppe, Michele Spina, Rocco Zaccagnino.....1004

Communications and System Security

A Rule-Based Training for Artificial Neural Network Packet Filtering Firewall

Akharin Khunkitti, Ponsuda Chongsujjatham..... 1010

Remote Identity Authentication in Heterogeneous Vehicle Environment Based On the Trusted Computing

Fu Wang, Qinggang Su Qinggang Su.....1015

Communications QoS, Reliability, and Modeling

STCP: Simple Transaction Commit Protocol for Wireless Sensor Networks

Youqing Guan, Ke Zhang, Yanran Guan..... 1022

Optical Networks and Systems

Construction Efficiency for Constructions of Optical Priority Queues Under Priority-Based Routing

Jay Cheng, Chun-yung Wang, Bin Tang.....1029

Communication Theory

Other Topics in Communications and Networking

A Capacitive Pest Detection Approach Based on STM32 Microcontroller

Feipeng Qiao, Chunlei Ji, Xiangxu Zeng, Jiyong Zhang..... 1035

A Gigabit Real-time Ethernet for Manufacture Automation Control

Xuebin Ma, Chengrui Zhang..... 1040

Analysis and Design of a Circularly Polarized Reflectantenna

Fengwei Yao, Lanxin Hu..... 1046

Design of a Miniaturized Dual-frequency Monopole Antenna for Applications in IoT

Yongsheng Zhao, Yuxiang Lv, Tingyong Si, Guangdong Du, Yantao Yu.....1051

Micro-UAV Detection and Identification Based on Radio Frequency Signature

Yue Xiao, Xuejun Zhang..... 1056

OPC UA PubSub Implementation and Configuration

<i>Zepeng Liu, Patrick Bellot</i>	1063
Research of Authentication Problems on Reliable Multi-Hop Broadcast Protocol for Vehicular Networking <i>Fu Wang, Qinggang Su</i>	1069
Resource-Priority Virtual Machine Placement in the Cloud <i>Hongpeng Tian, Jia Jiang</i>	1076
Simulation-based Comparison and Analysis of Time-based and Topology-based Emergency Dissemination Protocols in VANETs <i>Sara Imene Boucetta, Zsolt Csaba Johanyák</i>	1083

Image, Video, and Signal Processing

Signal Processing

A Rotor Fault Diagnosis Method Depending on Local Mean Decomposition and Singular Value Entropy <i>Bowen Wang, Shaojun Wang, Hong Lu, Xinbao Zhang, Peilin Li</i>	1089
A Transient Power Quality Signal Denoising Method Based on CEEMDAN and UWT <i>Pengyu Lu, Hongxun Liu</i>	1095
An Efficient Adaptive Online Neural Spikes Detection and Classification Engine Based on Bayesian Inference <i>Nan Li, Mohamad Sawan, Lei Wang</i>	1100
Arrhythmia Classification based on CNN_BILSTM <i>Xueqiong Yin, Chaobing Huang</i>	1105
Bayesian stagewise weak conjugate gradient pursuit algorithm for sparse signal reconstruction <i>Wei Gan, Hongye Li, Rong Jiao</i>	1110
CROSS-BIFREQUENCY ANALYSIS OF CARDIORESPIRATORY INTERACTIONS AT REST AND ZEN MEDITATION <i>Pei-chen Lo, Yi-zhe Wu</i>	1117
EMD-based Gray Association Algorithm for Group Ballistic Target <i>Huainian Zhang, Yan Zhou, Fangsheng Li, Lei Ma, Bing Wang</i>	1121

Joint Polarization and Space Domain Adaptive Beamforming for Dual Polarized Conformal Array

<i>Chao Liu, Zhengfei Fang, Shuai Xiang</i>	1126
Research on Multiple-Phase-Sectionalized-Modulation based Frequency Shift Jamming Method for Pulse Compression Radar <i>Jiawei Jiang, Hongyan Wang, Shuya Kong</i>	1131
Sound Source Separation by Spectral Subtraction Based on Instantaneous Estimation of Noise Spectrum <i>Kenji Ozawa, Masanori Morise, Shuichi Sakamoto, Kanji Watanabe</i>	1137
The pulse compression with Doppler shift in synthetic aperture sonar <i>Mengbo Ma, Jinsong Tang, Heping Zhong</i>	1143
The Research of Target Enhancement Method Based on Beam Energy Spectrum <i>Fuhu Chen, Jianfeng Tao</i>	1149
Underdetermined Wideband DOA Estimation Based on Proximity Searching DCS-SOMP <i>Jiang Ying, Wang Bingqie, Feng Mingyue, He Yi</i>	1152

Image Processing

A Calibration Method For The Vision System Of Go-Robot <i>Jie Song, Miao Zhong Yang</i>	1157
A Method for Human Parsing Based on Deep Learning And Attention Mechanism <i>Rui Yang, Chaobing Huang</i>	1163
A Partially Pre-Trained Dense Network for Image Super-Resolution <i>Yiwei Zhang, Peng Liu, Qinglian Chen, Yunfeng Guo, Jianxing Liang</i>	1168
A Residual Network of Water Scene Recognition Based on Optimized Inception Module and Convolutional Block Attention Module <i>Lianming Xie, Chaobing Huang</i>	1174
A Sequence-based Multi-Scale Network for Cross-View Gait Recognition <i>Shixian Luo, Shiling Feng, Huadong Pan, Jun Yin, Xingming Zhang</i>	1179
A Ship Classification Method Based on Residual Structure and Computational Verb <i>Jianghuai Huang, Chaobing Huang</i>	1184
A variational Bayesian Inference with Small Dataset for High-Precision Infrared Thermal Imaging <i>Ning Chu, Yaochun Hou, Dazhuan Wu, Djafari Ali Mohammed</i>	1190

Aerial Target Detection Based on Improved YOLOv3 Algorithm <i>Lecheng Ouyang, Huali Wang</i>	1196
Aided diagnosis of Alzheimer's disease based on structural Magnetic Resonance Imaging <i>Xi Liu, Yu Wang, Changyang Fu, Hongbing Xiao, Suxia Xing</i>	1201
An Attention Convolutional Neural Network for Forest Fire Smoke Recognition <i>Dexiong Zhang, Yichao Cao, Guangming Zhang, Xiaobo Lu</i>	1207
An improved ORB algorithm of extracting features based on local region threshold adaptive <i>Kun Yang, Dan Yin, Jian Zhang, Hua Xiao, Kaiqing Luo</i>	1212
Assessing diabetic foot injury based on 3D image technology <i>Li Jiang, Ji Qiao, Peng Jiang, Jun Li, Fusong Jiang</i>	1218
Cascade Wide Activation Multi-Scale Networks for Single Image Super-Resolution <i>Yiwei Zhang, He Huang, Qingliang Chen, Xu Zhang, Jianxing Liang</i>	1222
Classification of different degrees of ginkgo leaf disease based on deep learning <i>Kaizhou Li, Jianhui Lin, Jinrong Liu, Yandong Zhao, Suhan Dou</i>	1228
Convolutional Neural Networks for Face Anti-Spoofing and Liveness Detection <i>Hsueh-yi Sean Lin, Yu-wei Su</i>	1233
Design of Intelligent Measurement System of Vehicle Dimensions Based on Structured Light Imaging and Machine Vision <i>Hui Yu, Wen Yan, Jinglai Sun, Huiquan Wang, Lixin Zhang</i>	1238
Detecting Characters From Digital Image With Chinese Text Based on Grid Lines <i>Anshuang Sun, Xiwen Zhang</i>	1244
Document Image Blur Estimation With Multiresolution Toggle Mapping <i>Yafeng Li, Ying Lin</i>	1250
Driver Action Recognition Based on Attention Mechanism <i>Wenhao Wang, Xiaobo Lu, Pengguo Zhang, Huibin Xie, Wenbin Zeng</i>	1255
Evaluation of Metabolic Network for Alzheimer's Disease <i>Xixi Bu, Xufeng Yao, Lv Yuting, Xu Song, Huang Gang</i>	1260
Generating Chinese Classical Landscape Paintings Based on Cycle-Consistent Adversarial Networks <i>Xiaoxuan Lv, Xiwen Zhang</i>	1265

Hyperspectral Face Recognition Using Block based Convolution Neural Network and Adaboost Band Selection	
<i>Zhihua Xie, Yi Li, Jieyi Niu, Xinhe Yu, Ling Shi</i>	1270
Hyperspectral image classification based on pre-post combination process	
<i>Kaiqing Luo, Yang Qin, Dan Yin, Hua Xiao</i>	1275
Image classification of hepatic echinococcosis based on convolutional neural network	
<i>Zhihua Liu, Nadiya Abududikeyimu, Chuanbo Yan</i>	1280
Image Deblurring Method Based on Fourier Transform	
<i>Ming Chen, Zhang Xiuyang, Liu Huazhong, Xing Wei</i>	1285
Image Generation Method Based on Improved Condition GAN	
<i>Qiuzi Jin, Xin Luo, Youqun Shi, Kenji Kita</i>	1290
Inception DenseNet With Hybrid Activations For Image Classification	
<i>Jinming Zhang, Zuren Feng</i>	1295
Interest Points guided Convolution Neural Network for Furniture Styles Classification	
<i>Ting-ting Sui, Ke-yu Zhao, Hui Zhang, Qiao Hua</i>	1302
Laser strip center extraction methodology for the detection of weld seam	
<i>Shuo Li, Hong Lu, Mingtian Ma, Wenlong Zhou, Essa Alghannam</i>	1308
LWA: A lightweight and accurate method for unsupervised Person Re-identification	
<i>Yuelin Hu, Xiaodong Cai, Dai Huang, Yuzhu Liu</i>	1314
Monocular Depth Estimation with Traditional Stereo Matching Information	
<i>Hui Ren, Nan Gao, Jia Li</i>	1319
Multi-task network based pedestrian re-identification	
<i>Zongjing Cao, Hyo Jong Lee</i>	1324
Panoramic image mosaic technology based on SIFT algorithm and its application in power monitoring	
<i>Dun Li, Xiaofeng Zhang, Dezhi Han, Li Zhang</i>	1329
Saliency Detection with Stepwise Aggregation Network	
<i>Shurong Yang, Jianhua Li, Hongshuang Zhang</i>	1334
The kernel wiener filter algorithm based on path self-similarity for image denoising	
<i>Shuping Wang, Qiyu Jin</i>	1340

Video Processing

An Edge-based Multiple Total Variation model
Tingting Zhang, Qiyu Jin..... 1345

Video Super-resolution Reconstruction Using Deep and Shallow Convolutional Neural Networks
Xuan Zhu, Chao Zhang, Zhenpeng Guo, Jiaping Xue, Xin Liu..... 1351

Signal Processing for Communications

Remote Sensing

A Class-Oriented Visualization Method for Hyperspectral Imagery
Danfeng Liu, Jon Atli Benediktsson..... 1357

A Electrical Field with Multi- Parameters Sounding System for Observations through Thunderstorms
Hai Yu, Tinglong Zhang, Xiaoping Zhao, Yang Chen, Yi Gao..... 1362

Research and Design of Electronic Dictionary for Key Data Index of Chinese Patent Medicine
Wangping Xiong, Zhijun Zeng, Xian Zhou..... 1369

Computer Graphics, Animation, and Virtual Reality

Adaptive Volumetric Video Streaming Platform
Srinivas Gudumasu, Julien Fleureau, Yong He..... 1373

Other Topics in Signal, Image and Multimedia Processing

A Robust Solution to the Perspective-Three-Point Problem
Qinghua Geng, Weiming Liu..... 1378

Face Attribute Transformation Based On ConStarGAN
Zhang Qi, Du Jun, Yu Jin..... 1383

Salient Object Detection with Residual Refinement Network
Hongshuang Zhang, Jianhua Li, Shurong Yang..... 1391

Wrong Question Set Generation and Answer Statistics Based on Reviewed Markers Recognition
Zhaomin Zhan..... 1398

Data Engineering and Data Mining

Data Mining Foundations

- A Privacy Preserving Algorithm for Mining Rare Association Rules by Homomorphic Encryption
Weimin Ouyang, Qinhua Huang..... 1403
- Prediction of House Price Based on The BP Neural Network in The Keras Deep Learning Framework
Zhongyun Jiang, Guoxin Shen..... 1408
- Sleep Breathing Data Analysis Based on Econometrics
Cai Chen, Wei Li, Dedong Ma..... 1413

Bioinformatics and Medical Informatics

- A Comparison of Low-frequency Power Distribution on a Realistic Head Model and a Sphere Model
Manling Ge, Xianchong Huang, Minghao Yang, Jiajun Cui, Zhitong Guo..... 1418
- Acoustic Characteristics of Normal and Pathological Voices Analysis and Recognition
Xiaojun Zhang, Lili Zhang, Zhi Tao, Heming Zhao..... 1423
- An evaluation model of hand function rehabilitation based on cloud model
Wei Sun, Qin Liu, Haining Peng, Gu Kang, Li Li..... 1428
- Bioinformatics analysis of colorectal cancer related gene
Jingshu Zhang, Hao Sun, Xuyao An, Kun Yu, Penglin Li..... 1433
- Machine Learning Based Information Extraction for Diabetic Nephropathy in Clinical Text Documents
Xiaoyuan Bao, Shuanglian Xie, Kai Song, Yunhaonan Yang, Kai Zhang..... 1438
- Predicting Blood Glucose Levels with EMD and LSTM Based CGM Data
Wei Song, Wanyuan Cai, Jing Li, Fusong Jiang, Shengqi He..... 1443
- SNP selection based on k-center algorithm
Lei Li, Limin Cao..... 1449
- Topological Structure Analysis by Reconstructing a High-confidence Protein-Protein Interaction Network of Yeast from Different Interaction Datasets
Yun-yuan Dong, Xiu-mei Li..... 1455

Data Mining Applications

A Tripartite Graph Recommendation Algorithm Based on Item Information and User Preference

Zhenyu Yao, Jinkuan Wang, Yinghua Han..... 1460

Application of K-means Clustering Algorithms in Optimizing Logistics Distribution Routes

Haonan Ma, Yongchen He, Meng Huang, Yana Wen, Yuhan Cheng..... 1466

Bond transaction link prediction based on dynamic network embedding and time series analysis

Wei Hao, Hanglong Zhan, Xiaojing Bao, Yanmin Lu, Jian Jin..... 1471

Mining frequent patterns in data using Apriori and Eclat - A comparison of the algorithm performance and association rule generation

Vlad Robu, Vitor Duarte Dos Santos..... 1478

Negative Examples Sampling Based on Factorization Machines for OCCF

Wei-bin Feng, Zhen-shun Zhang, Chuan-zhong Li, An-ping Song..... 1482

Network Embedding Method Based On Extractive Summary

Yuanfa Ji, Yuzhu Liu, Xiaodong Cai, Dai Huang, Yuelin Hu..... 1486

Parameters Optimization for Catalyst Centrifugal Spray Drying Process Based on BP Neural Network and Genetic Algorithm

Yunfei Liu, Jingjing Xu, Tianyang Ye..... 1491

Prediction Method of Aeroengine Residual Life Based on Stacked Sparse Automatic Encoder

Xiangwei Kong, Peng Wang, Zhenhua Wu, Liang He, Xueya Liu..... 1497

Data Engineering Technologies

Research on in-situ Detection algorithm based on roundness error

Caili Yu, Ning Ren..... 1503

Data Engineering Applications

Application of improved multi-threshold birch clustering in reservoir prediction

Qifeng Sun, Youxiang Duan, Fan Liu, Hongqiang Li..... 1509

Tunnel Section Extraction and Deformation Analysis Based on Mobile Laser Scanning

Liangzhi Zhong, Xinwen Gao, Edvins Dancigs, Ying Chang.....1515

Other Topics in Data Mining and Data Engineering

An automatic data cleaning method for GPS trajectory data on Didi Chuxing GAIA Open Dataset using machine learning algorithm

Jiashun Zhang, Ying Sun.....1522

Applying Process Mining to support Management of Predictive Analytics/Data Mining Projects in a Decision Making Center

Marlene Ofelia Sanchez Escobar, Rafael Lozano Espinosa, Jose Martin Molina Espinosa, Juana Julieta Noguez Monroy, Genoveva Vargas Solar.....1527

The Detection Algorithms for Similar Duplicate Data

Jin-yu Song, Quan Yu, Ruo-yu Bao.....1534

Software Engineering

Software Engineering Methodologies

Software Systems and Applications

A Course Scheduling Algorithm in secondary vocational School Based on Genetic Algorithm

Mengyuan Ba, Yingying Hu, Can Xu, Yi Zhong.....1543

An application to Generate, Correct and Grade Multiple-choice Tests

M. Padoca Calado, Ana Aroeira Ramos, Paulino Jonas.....1548

Other Topics in Software Engineering

Generic Software Architecture for Semantic and Visual Queries

Sergio Zepeda, Juan C. Estrada, Daniel Estrada.....1553

Other Topics in Informatics

Other Topics in Informatics

An Identity-based Aggregate Signature Scheme for Wireless Sensor Network Environmental Monitoring

Dian-jun Lu, Yu Wang.....1559

Application of a New Approach of Fuzzy Soft Sets Based Decision-Making in Website Rank and Similarity

<i>Xiuqin Ma, Huifang Li, Hongwu Qin, Qinghua Fei, Zhangyun Gong</i>	1565
Combinatorial Turbofan Engine Agent and Short Take-off and Vertical Landing (STOVL) Aircraft in 5G OGCE	
<i>Zhi Lü, Mingzhe Yuan, Yi Lü, Zhongfeng Wang</i>	1571
DOA estimation on CACIS type array based on fast-RVM algorithm	
<i>Cheng Bo-lin, Li Ming-wei, Feng Ming-yue, Tang Xiao-jie</i>	1577
Extrapolation Techniques for Neural-based Nonlinear Electronic Modeling and Circuit Simulation	
<i>Q.j. Zhang, W.c. Na, M. Li, Q. Ding, G. Wu</i>	1583
Knowledge-based Neural Networks for Modeling of High-Frequency Electronics Circuits	
<i>Qijun Zhang, Na Weicong, Li Ming, Lan Yonghai, Ding Qing</i>	1589
Literature review of marine renewable energy utilization based on Magnetohydrodynamics power generation	
<i>Zhengyong Shu, Qiuying Zhu, Yongguo Li</i>	1594
Multi-pass Object Detection Method For Flaw Inspection of Ammeters	
<i>Guang Shen, Zhiqiang Jiao, Huajiang Yan, Qiang Wang, Chuanzi Xu</i>	1600
Research on Enterprises Group Decision-making System from the Perspective of Knowledge Management	
<i>Wang Ying, Luan Yejun, Dou Yihua</i>	1605
Simulation of a hybrid-powered electric golf cart based on PEMFC, battery, and super-capacitor	
<i>Chung-hsing Chao</i>	1610
Spectrum data acquisition and modeling of materials based on compressed sensing	
<i>Fanzhi Kong, Genyuan Zhang</i>	1616
User Satisfaction Based Operational Benefit Evaluation Technology of Regional Integrated Energy System	
<i>Zhiqiang He, Hua Luo, Hong Liu, Wenwei Yuan</i>	1621
Wetland multi parameter wireless multi-point monitoring system based on LabView	
<i>Jian Han, Deqing Mo, Xinying Wen</i>	1627