

ISSN1000-3428
CN31-1289/TP
CODEN JISGEV

计算机工程

Computer Engineering

www.ecice06.com

第39卷 - 第5期 - 2013年5月15日

Vol.39 - No.5 - 15 May 2013

2013 05

■ 中科院CSCD核心期刊 ■ 中国科技核心期刊 ■ RCCSE中国核心学术期刊 ■ 工业和信息化部精品期刊



华东计算技术研究所 主办
上海市计算机学会

计算机工程(月刊)

Jisuanji Gongcheng

第 39 卷 第 5 期 2013 年 5 月 15 日

目次

· 专栏 ·

- 一种自适应抽样方法在网络管理中的应用研究.....要趁红,裴昌幸,王民(1)
- 一种最优特里树合并算法.....熊帅,常炳国,李睿(5)
- 起重机吊装路径规划系统设计.....林远山,吴迪,王欣,等(12)
- 基于差分进化的鱼群算法及其函数优化应用.....张大斌,杨添柔,温梅,等(18)
- 基于耦合同步混沌系统的超声波测距方法.....戴华平,胡红亮,王旭,等(23)
- 城市环境下无线传感器网络信道测量与分析.....张诚,罗炬锋,田文强,等(28)
- 基于动态场景估计的自适应图像增强算法.....张超,杨晶晶,王盛,等(34)

· 先进计算与数据处理 ·

- 客户云需求波动下的多实例组合决策研究.....聂规划,余其平,陈冬林(42)
- 基于 FS-DS 的信息融合方法及其应用.....张秋,孙顺远,梁小凡,等(48)
- 基于稀疏约束的 LLE 改进算法.....孙洋,叶庆卫,王晓东,等(53)
- GIS 中基于拓扑的简单线要素多边形化方法.....周玉科,周成虎,马廷,等(57)
- 基于聚类的多传感器数据融合方法研究.....黎亮,谭世海,师伟(61)
- 3DR44 模型的动态方向关系与反向关系研究.....张丽平,李松,李林,等(65)
- 基于 DST 和 PCR2 的自适应信息融合算法.....陈金广,张芬(69)

· 体系结构与软件技术 ·

- 基于基地址寄存器映射的数据缓存研究.....沈秀红,赵朝君,孟建熠,等(73)
- 组合服务交互测试研究综述.....余莹(78)
- 快速上下文切换调度算法.....刘超明,钱振江,黄皓(84)
- 基于集群式供应链的建模方法研究.....安吉宇,翟钰琦,薛霄,等(88)
- 一种高效纹理映射单元的硬件体系结构设计.....赵国宇,郭炜,常轶松,等(92)

· 移动互联与通信技术 ·

- 传统游戏的网络实现技术.....徐彦蛟,李顺东,陈振华(96)
- 基于手机数据的社交网络构建.....施伟,刘慧君,傅鹤岗,等(101)
- 能量受限无线传输的可靠性分析.....童安玲,黄玉划,曹玲玲(106)
- 物联网中无线传感节点跨层数据收集协议.....卢旭,程良伦(110)
- 一种改进的无线网络传输控制协议.....秦军,陆希,韩晨(114)
- 无线传感器网络中时延受限的高能效路由算法.....掌明(118)
- 无线传感器网络双向成对时间同步优化算法.....江禹生,樊宇(123)

· 安全技术 ·

- 基于 Kerberos 的 RFID 双向认证协议.....史长琼,黄智豪(127)
- 不均衡数据集下基于 SVM 的托攻击检测方法.....吕成成,王维国(132)
- 非超递增序列背包加密算法的攻击方法.....于志敏,古春生,景征骏,等(136)
- 基于 Kerberos 和 HIBC 的网格认证模型.....刘军,樊琳娜,吴兆峰,等(140)

基于 Android 平台的访问权限机制优化方案	吴大勇, 郑紫微(144)
基于优先权的 P2P 网络信任模型	黎梨苗, 陈志刚, 桂劲松, 等(148)
基于主成分分析的网络入侵检测算法	李占波, 白全海, 申义彩(152)
一种无证书签名方案的安全性分析及改进	潘 帅, 高德智, 翟振元(156)

• 人工智能及识别技术 •

基于滑模变结构的移动机器人轨迹跟踪控制	张扬名, 刘国荣, 杨小亮(160)
基于多核支持向量描述的单类分类方法	吴定海, 张培林, 王怀光, 等(165)
基于改进模糊模拟的混合遗传算法	郑帅丽, 李成严(169)
基于哈夫曼树的雷电数据采样算法	彭永供, 邱桃荣, 林子渊, 等(174)
格雷编码与相移结合的双目三维重构	王长波, 谢明红(178)
云计算环境下基于改进粒子群的任务调度算法	封良良, 张 陶, 贾振红, 等(183)
基于混沌免疫优化 RBF 网络的遥感水深反演	朱 玉, 赵 卿, 周兴东(187)
一种基于匹配次数的运动目标检测算法	段胜业, 李俊红, 许文培, 等(192)
一种改进的量子遗传算法及其应用	杨树欣, 詹宁波, 田林怀(196)
基于多种种群模型协同进化的粒子群优化算法	徐冰纯, 葛洪伟, 王燕燕(200)
基于分段式前景涂抹和背景细化的文本行分割	易晓芳, 卡米力·木依丁, 艾斯卡尔·艾木都拉(204)
基于类内一致性的红外背景弱目标检测方法	侯 旺, 钟立军, 张小虎, 等(209)
方向梯度直方图及其扩展	傅红普, 邹北骥(212)
基于混沌映射的混合果蝇优化算法	程 慧, 刘成忠(218)
基于染色体差异与变异衰减原则的进化算法	房茂燕, 汪民乐, 毕义明, 等(222)
基于自适应梯度最速下降的分类字典训练算法	徐 健, 常志国, 赵小强, 等(225)
基于语言模型和特征分类的抄袭判定	李 惠, 刘 颖(230)
L 范式多测度群体多样性反馈的 PSO 算法	江善和, 纪志成, 沈艳霞(235)

• 图形图像处理 •

基于复杂网络的图像建模及特征提取方法	汤 进, 陈 影, 江 波, 等(243)
一种基于准极坐标的频域图像配准算法	李振红, 杨建伟(248)
基于 FPGA 的边缘自适应图像缩放算法	李自勤, 蒋 涛, 项铁铭(253)
基于稳健特征统计的医学影像分割算法	刘玲玲, 康晓东, 王 昊, 等(257)
基于消失线的长方体表面透视变形校正方法	郑全新, 杨明强, 李文辉(261)
一种基于支持向量机的棉花图像分割算法	陈钦政, 赖惠成, 王 星, 等(266)

• 开发研究与工程应用 •

GPRS 在交通图像采集中的应用	张 辉, 温泽宏(270)
时间同步在管道泄漏检测中的应用研究	丁业平, 刘 胜, 王玉梅, 等(273)
基于随机共振的语音真实性检测方法	潘 平, 罗 辉, 李换双(277)
维吾尔族汉语发音与标准音的声学区别	哈妮克孜·伊拉洪, 那斯尔江·吐尔逊, 阿迪力·买买提(280)
一种新型嵌入式实时操作系统的移植研究	任 慰, 何顶新, 赵 金(284)
OFDM 同步与信道估计研究及 FPGA 实现	何世彪, 张 青, 韩彦净, 等(288)
多目标跟踪算法的最优子模式分配概率度量	刘国营, 陈秀宏(293)
工程飞行模拟器的高速实时数据采集系统设计	于继超, 沈为群, 邹昱芳(297)
基于多核平台的长期演进信道估计器设计	贺茂飞, 于学球, 张家杰, 等(301)
FPGA 位流解析及电路还原方法	吴 强, 张逸中(305)
基于 Linux 的便捷式移动终端设计与实现	李敏杰, 昂志敏, 文建刚, 等(309)
基于 DR/GIS 组合导航的误差补偿研究	许建国, 张志利, 周召发(314)
基于综合性能的 Markov 过程验证与分析	纪明宇, 王海涛, 陈志远(318)

Computer Engineering (Monthly)

Vol.39 No.5

15 May 2013

Contents

Application Research on Self-adaptive Sampling Method in Network Management.....	YAO Chen-hong, PEI Chang-xing, WANG Min(1)
An Optimal Trie Merging Algorithm.....	XIONG Shuai, CHANG Bing-guo, LI Rui(5)
Design of Path Planning System for Crane Lift.....	LIN Yuan-shan, WU Di, WANG Xin, et al(12)
Fish Swarm Algorithm Based on Differential Evolution and Its Function Optimization Application.....ZHANG Da-bin, YANG Tian-rou, WEN Mei, et al(18)
Ultrasonic Distance Measurement Method Based on Coupled Synchronization Chaos System.....	DAI Hua-ping, HU Hong-liang, WANG Xu, et al(23)
Measurement and Analysis of Wireless Sensor Network Channel in Urban Environment.....	ZHANG Cheng, LUO Ju-feng, TIAN Wen-qiang, et al(28)
Adaptive Image Enhancement Algorithm Based on Dynamic Scene Estimation.....	ZHANG Chao, YANG Jing-jing, WANG Sheng, et al(34)
Study on Multi-instance Combination Decision Under User Cloud Demands Fluctuation.....	NIE Gui-hua, SHE Qi-ping, CHEN Dong-lin(42)
Information Fusion Method Based on FS-DS and Its Application.....	ZHANG Qiu, SUN Shun-yuan, LIANG Xiao-fan, et al(48)
Improved LLE Algorithm Based on Sparse Constraint.....	SUN Yang, YE Qing-wei, WANG Xiao-dong, et al(53)
Polygonization Method of Simple Linestrings Based on Topology in GIS.....	ZHOU Yu-ke, ZHOU Cheng-hu, MA Ting, et al(57)
Research on Multi-sensor Data Fusion Method Based on Clustering.....	LI Liang, TAN Shi-hai, SHI Wei(61)
Research on Dynamic Direction Relation and Reverse Relation of 3DR44 Model.....	ZHANG Li-ping, LI Song, LI Lin, et al(65)
Adaptive Information Fusion Algorithm Based on DST and PCR2.....	CHEN Jin-guang, ZHANG Fen(69)
Data Buffer Research Based on Base Address Register Mapping.....	SHEN Xiu-hong, ZHAO Chao-jun, MENG Jian-yi, et al(73)
Research Review on Interaction Test of Composite Service.....	YU Ying(78)
Fast Context Switching Schedule Algorithm.....	LIU Chao-ming, QIAN Zhen-jiang, HUANG Hao(84)
Research on Modeling Method Based on Cluster Supply Chain.....	AN Ji-yu, ZHAI Yu-qi, XUE Xiao, et al(88)
An Efficient Hardware Architecture Design of Texture Mapping Unit.....	ZHAO Guo-yu, GUO Wei, CHANG Yi-song, et al(92)
Implementation Technology of Traditional Games in Network.....	XU Yan-jiao, LI Shun-dong, CHEN Zhen-hua(96)
Social Network Construction Based on Mobile Phone Data.....	SHI Wei, LIU Hui-jun, FU He-gang, et al(101)
Reliability Analysis of Energy-limited Wireless Transmission.....	TONG An-ling, HUANG Yu-hua, CAO Ling-ling(106)
Cross-layer Data Gathering Protocol for Wireless Sensing Node in Internet of Thing.....	LU Xu, CHENG Liang-lun(110)
An Improved Transmission Control Protocol in Wireless Network.....	QIN Jun, LU Xi, HAN Chen(114)
Delay Constrained Energy Efficient Routing Algorithm in Wireless Sensor Network.....	ZHANG Ming(118)
Optimization Method for Two-way Pairs Time Synchronization in Wireless Sensor Network.....	JIANG Yu-sheng, FAN Yu(123)
RFID Double-authentication Protocol Based on Kerberos.....	SHI Chang-qiong, HUANG Zhi-hao(127)
Shilling Attack Detection Method Based on SVM Under Unbalanced Datasets.....	LV Cheng-shu, WANG Wei-guo(132)
Attack Method for Non Super-increasing Sequence Knapsack Encryption Algorithm.....	YU Zhi-min, GU Chun-sheng, JING Zheng-jun, et al(136)
Grid Authentication Model Based on Kerberos and HIBC.....	LIU Jun, FAN Lin-na, WU Zhao-feng, et al(140)
Optimization Scheme of Access Permission Mechanism Based on Android Platform.....	WU Da-yong, ZHENG Zi-wei(144)
P2P Network Trust Model Based on Priority.....	LI Li-miao, CHEN Zhi-gang, GUI Jin-song, et al(148)
Network Intrusion Detection Algorithm Based on Principal Component Analysis.....	LI Zhan-bo, BAI Quan-hai, SHEN Yi-cai(152)
Security Analysis and Improvement of an Certificateless Signature Scheme.....	PAN Shuai, GAO De-zhi, ZHAI Zheng-yuan(156)
Mobile Robot Trajectory Tracking Control Based on Sliding Mode Variable Structure.....ZHANG Yang-ming, LIU Guo-rong, YANG Xiao-liang(160)

One-class Classification Method Based on Multi-kernel Support Vector Data Description.....	WU Ding-hai, ZHANG Pei-lin, WANG Huai-guang, et al(165)
Hybrid Genetic Algorithm Based on Improved Fuzzy Simulation.....	ZHENG Shuai-li, LI Cheng-yan(169)
Lightning Data Sampling Algorithm Based on Huffman Tree.....	PENG Yong-gong, QIU Tao-rong, LIN Yu-yuan, et al(174)
Binocular Three-dimension Reconstruction Combined with Gray Coding and Phase-shift.....	WANG Chang-bo, XIE Ming-hong(178)
Task Schedule Algorithm Based on Improved Particle Swarm Under Cloud Computing Environment.....	FENG Liang-liang, ZHANG Tao, JIA Zhen-hong, et al(183)
Remote Sensing Water Depth Inversion Based on Chaotic Immune Optimization RBF Network.....	ZHU Yu, ZHAO Qing, ZHOU Xing-dong(187)
A Moving Object Detection Algorithm Based on Match Time.....	DUAN Sheng-ye, LI Jun-hong, XU Wen-pei, et al(192)
An Improved Quantum Genetic Algorithm and Its Application.....	YANG Shu-xin, ZHAN Ning-bo, TIAN Lin-huai(196)
Particle Swarm Optimization Algorithm Based on Multi-swarm and Multi-model Cooperative Evolution.....	XU Bing-chun, GE Hong-wei, WANG Yan-yan(200)
Text Line Segmentation Based on Segmented Foreground Daub and Background Thinning.....	YI Xiao-fang, KAMIL Moydin, ASKAR Hamdulla(204)
Infrared Background Weak Target Detection Method Based on Consistency in Class.....	HOU Wang, ZHONG Li-jun, ZHANG Xiao-hu, et al(209)
Histogram of Oriented Gradient and Its Extension.....	FU Hong-pu, ZOU Bei-ji(212)
Mixed Fruit Fly Optimization Algorithm Based on Chaotic Mapping.....	CHENG Hui, LIU Cheng-zhong(218)
Evolution Algorithm Based on Chromosome Difference and Variation Attenuation Principle.....	FANG Mao-yan, WANG Min-le, BI Yi-ming, et al(222)
Discriminate Dictionary Training Algorithm Based on Adaptive Steepest Descent.....	XU Jian, CHANG Zhi-guo, ZHAO Xiao-qiang, et al(225)
Plagiarism Judgment Based on Language Model and Feature Classification.....	LI Hui, LIU Ying(230)
Particle Swarm Optimization Algorithm of L Norm Multi-measures Population Diversity Feedback.....	JIANG Shan-he, JI Zhi-cheng, SHEN Yan-xia(235)
Image Modeling and Feature Extraction Method Based on Complex Network.....	TANG Jin, CHEN Ying, JIANG Bo, et al(243)
A Frequency Domain Image Registration Algorithm Based on Quasi-polar Coordinate.....	LI Zhen-hong, YANG Jian-wei(248)
Edge Adaptive Image Scaling Algorithm Based on FPGA.....	LI Zi-qin, JIANG Tao, XIANG Tie-ming(253)
Medical Image Segmentation Algorithm Based on Robust Feature Statistics.....	LIU Ling-ling, KANG Xiao-dong, WANG Hao, et al(257)
Perspective Distortion Correction Method of Cuboid's Surface Based on Vanishing Line.....	ZHENG Quan-xin, YANG Ming-qiang, LI Wen-hui(261)
An Cotton Image Segmentation Algorithm Based on Support Vector Machine.....	CHEN Qin-zheng, LAI Hui-cheng, WANG Xing, et al(266)
Application of GPRS in Traffic Image Acquisition.....	ZHANG Hui, WEN Ze-hong(270)
Application Study on Time Synchronization in Pipeline Leakage Detection.....	DING Ye-ping, LIU Sheng, WEN Yu-mei, et al(273)
Voice Authenticity Detection Method Based on Stochastic Resonance.....	PAN Ping, LUO Hui, LI Huan-shuang(277)
Acoustic Difference Between Uyghur's Chinese Pronunciation and Standard Pronunciation.....	Hankiz Ilahun, Nasirjan Tursun, Adil Mamat(280)
Poring Research on a New Embedded Real-time Operating System.....	REN Wei, HE Ding-xin, ZHAO Jin(284)
Research on Synchronization and Channel Estimation of OFDM and FPGA Implementation.....	HE Shi-biao, ZHANG Qing, HAN Yan-jing, et al(288)
Optimal Sub Pattern Assignment Probability Metric for Multi-target Tracking Algorithm.....	LIU Guo-ying, CHEN Xiu-hong(293)
High-speed Real-time Data Acquisition System Design of Engineering Aircraft Simulator.....	YU Ji-chao, SHEN Wei-qun, ZOU Yu-fang(297)
Design of Channel Estimator for Long Term Evolution Based on Multi-core Platform.....	HE Mao-fei, YU Xue-qiu, ZHANG Jia-jie, et al(301)
Method of Bitstream Resolving and Circuit Recovering of FPGA.....	WU Qiang, ZHANG Yi-zhong(305)
Design and Implementation of Convenient Mobile Terminal Based on Linux.....	LI Min-jie, ANG Zhi-min, WEN Jian-kuo, et al(309)
Research on Error Compensation Based on DR/GIS Integrated Navigation.....	XU Jian-guo, ZHANG Zhi-li, ZHOU Zhao-fa(314)
Verification and Analysis of Markov Process Based on Integrated Performance.....	JI Ming-yu, WANG Hai-tao, CHEN Zhi-yuan(318)