

ISSN1000-3428
CN31-1289/TP
CODEN JISGEV

计算机工程

Computer Engineering

www.ecice06.com | 第39卷 - 第1期 - 2013年1月15日 | 2013 01
Vol.39 - No.1 - 15 January 2013

■ 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 East China Institute of Computer Technology
上海市计算机学会 Shanghai Computer Society

计算机工程 (月刊)

Jisuanji Gongcheng

第 39 卷 第 1 期 2013 年 1 月 15 日

目次

· 专栏 ·

- 基于资源的灾难恢复能力指标体系及其度量.....张国强, 杨英杰, 李俊锋(1)
- 基于人眼侧抑制机制的自动色彩均衡化算法.....查 炜, 汪荣贵, 傅剑峰, 等(7)
- Kaminsky 域名系统缓存投毒防御策略研究.....许成喜, 胡荣贵, 施 凡, 等(12)
- 城市建筑中移动通信信号的干扰抑制.....柏 晨(18)
- 有向加权复杂网络抗毁性测度研究.....汤浩锋, 张 琨, 郁 楠, 等(23)
- 基于插桩和布尔逻辑的运行时程序验证框架.....李业华, 顾乃杰, 张颖楠, 等(29)
- 基于 Petri 网和混合蚁群算法的多星成像调度.....龙运军, 陈宇宁, 陈英武, 等(35)

· 软件技术与数据库 ·

- 一种改进的多边形数据内点自动生成算法.....卢 浩, 钟耳顺, 王天宝, 等(41)
- 基于多线程技术的分辨函数析取范式生成算法.....蒙祖强, 周石泉, 黄柏雄(45)
- 基于退火遗传算法的单元测试方法.....赵慧娟, 孙文辉(49)
- 基于 Petri 网的联锁软件测试用例动态生成.....强生杰, 任恩恩(54)
- 基于项目和信任的协同过滤推荐算法.....朱丽中, 徐秀娟, 刘 宇(58)
- 一种可扩展的业务对象建模框架.....曹 旻, 汪 璐(63)
- 程序局部性的量化分析.....刘 扬, 安 虹, 邓博斌, 等(67)
- 基于多角度关联模型的实体检索方法.....王 东, 牛军钰(71)
- 基于链接路径搜索的 URL 属性集成方法.....马艳红, 胡学钢, 吴共庆(76)
- 基于 API 依赖关系的代码相似度分析.....姚新磊, 庞建民, 岳 峰, 等(80)
- 基于 LabVIEW 的嵌入式软件能耗测量方法.....郭真林, 桑 楠, 江 维, 等(85)

· 网络与通信 ·

- F_2+vF_2 环上的接近 MDR 码.....刘修生, 刘花璐(89)
- 分布式 CoMP 系统中联合预处理方法研究.....杨 军, 张正孝, 蒋占军(93)
- 基于 HOT 理论的网络抗毁性动态演化模型.....刘媛妮(97)
- 无线传感器网络低功耗多跳广播时钟同步算法.....覃秀英, 郑 霖, 胡 雯, 等(102)
- 认知无线网络 MAC 协议的控制信道建模.....王晓飞, 张 希, 张 权, 等(106)
- 无线传感器网络中目标覆盖图的分解.....张红武, 张 聪, 丰洪才, 等(111)
- 基于 WLAN 与蜂窝网协同的终端选择算法.....胡陶军, 胡 铮, 苗 杰(116)
- 基于信誉度的合作式频谱感知.....张晓玉, 袁 野, 杜 荣, 等(120)
- P2P 流媒体服务方案及其关键技术研究.....张明军, 彭 姪, 俞文静(125)
- 包抽样对异常检测的影响及其消除方法研究.....杨永强, 邵 超, 张建辉(131)

· 安全技术 ·

- 一种抗几何变换攻击的矢量数据盲水印算法.....王云飞, 赵 婧, 王 拓, 等(136)
- 一种三方认证密钥协商协议的分析与改进.....唐祚波, 缪祥华(140)

基于多比特输出点函数混淆器的消息认证码	龚高翔, 袁征, 李超(144)
基于四元数的双彩色图像盲水印算法	姚涛, 苏庆堂, 阙大顺(149)
基于 ECC 的 RFID 组证明协议分析及改进	康鸿雁(153)
一种基于匿名区域变换的位置隐私保护方法	肖燕芳, 徐红云(157)
一种可证安全的两方口令认证密钥交换协议	项顺伯, 彭志平, 柯文德(164)

• 人工智能及识别技术 •

时滞无关的 CNN 稳定性分析及保密通信应用	张小红, 李德音(168)
基于评分矩阵预填充的协同过滤算法	彭石, 周志彬, 王国军(175)
基于核的最小均方误差改进算法及其应用	赵英男, 吴知, 金士伟(179)
模糊最小包含球支持向量机	刘建华, 龚松杰(183)
一种基于目标分割的实时跟踪方法	陈临强, 汪雯斌, 何一娜(187)
双支持向量回归的牛顿算法	郑逢德, 张鸿宾(191)
基于改进 Chamfer 匹配的台标识别	胡星火, 姚剑敏, 林志贤, 等(195)
基于肤色模型和中线定位的人脸检测算法	刘在英, 朱琳玲, 杨平(200)
基于粒子群优化的非平滑非负矩阵分解算法	戴华平, 王旭, 胡红亮, 等(204)
量子遗传算法在口腔种植定位中的研究与应用	黄俊华, 唐平, 陈松龄, 等(208)
个人运动管理系统中的行为识别方法	赵中堂, 马倩, 陈益强(213)

• 图形图像处理 •

改进的圆形标志亚像素级中心检测方法	许策, 马杰, 赵全明, 等(217)
自适应 Shearlet 域约束的全变差图像去噪	朱华生, 邓承志(221)
一种基于梯度相关的指静脉认证算法	林春漪, 李明忠, 孙骁(225)
一种基于字典的快速分形图像编码方法	孙媛媛, 孔瑞卿(230)
基于 Snake 模型的植物叶片面积计算方法	王静文, 刘弘(234)
改进 SIFT 算法在文字图像匹配中的应用	胡海青, 谭建龙, 朱亚涛, 等(239)
基于量子理论的图像中值滤波	谢可夫, 许悟生(244)
基于小波域反正切变换的红外图像增强算法	陈军, 张长江(248)
基于分水岭算法的图像融合质量评价方法	黄应清, 齐鸥, 蒋晓瑜, 等(252)

• 工程应用技术与实现 •

矿用救生舱装配与维修人机验证	李元斌, 孙有朝, 张燕军(256)
基于移动代理的 Struts 2 框架	杨力, 陈利学, 赵永清, 等(260)
动态可重构总线数据传输管理方法设计与实现	邓哲, 张伟功, 朱晓燕, 等(264)
复杂实时系统可调度性判定工具的研究与实现	张永悦, 孙瑜, 李允, 等(270)
基于 I/O 缓冲区读写的控制台远程交互模型	唐磊, 宋宇波, 蓝智灵(275)

• 开发研究与设计技术 •

高层体系结构中时间管理算法研究及改进	王月, 李宏伟, 孙黎阳(279)
基于二次曲线的线阵相机标定技术	刘仁峰, 龚俊斌, 田金文(283)
湖库水质监测与水华预警信息系统	郝启文, 王小艺, 许继平, 等(287)
基于置信距离的冲突证据合成方法	潘恺, 李辉, 邢钢(290)
基于球结构 SVM 的多标签分类	蒋华, 戚玉顺(294)
基于小波变换的多视角视频可伸缩编码系统	金雪松, 赵志杰, 林茂六(298)
实时仿真并行调度算法研究	贾燕成, 黎英(303)
改进的基因拷贝数变异检测算法	李平, 杨洪斌, 吴悦(309)
IE8.0 登录信息保护机制的缺陷分析与利用	张航, 吴灏, 许蓉(313)
H.264 高清编码器系统的设计与仿真	王少伟, 周莉, 孙涛, 等(318)

Computer Engineering (Monthly)

Vol.39 No.1

15 January 2013

Contents

Disaster Recovery Capability Index System and Its Measurement Based on Resource.....	ZHANG Guo-qiang, YANG Ying-jie, LI Jun-feng(1)
Automatic Color Equalization Algorithm Based on Human Eye Lateral Inhibition Mechanism.....	ZHA Wei, WANG Rong-gui, FU Jian-feng, et al(7)
Research on Defense Strategy of Kaminsky DNS Cache Poisoning.....	XU Cheng-xi, HU Rong-gui, SHI Fan, et al(12)
Interference Suppression for Mobile Communication Signals in Urban Architecture.....	BO Chen(18)
Research on Invulnerability Measure of Directed and Weighted Complex Network.....	TANG Hao-feng, ZHANG Kun, YU Nan, et al(23)
Runtime Program Verification Framework Based on Instrumentation and Boolean Logic.....	LI Ye-hua, GU Nai-jie, ZHANG Ying-nan, et al(29)
Multiple Satellites Imaging Scheduling Based on Petri Net and Hybrid Ant Colony Algorithm.....	LONG Yun-jun, CHEN Yu-ning, CHEN Ying-wu, et al(35)
.....
.....
An Improved Polygon Data Interior Point Automatic Generation Algorithm.....	LU Hao, ZHONG Er-shun, WANG Tian-bao, et al(41)
Disjunction Normal Form Generation Algorithm of Discernibility Function Based on Multi-thread Technology.....
.....	MENG Zu-qiang, ZHOU Shi-quan, HUANG Bo-xiong(45)
Unit Test Method Based on Annealing Genetic Algorithm.....	ZHAO Hui-juan, SUN Wen-hui(49)
Dynamic Generation of Interlocking Software Test Case Based on Petri Net.....	QIANG Sheng-jie, REN En-en(54)
Collaborative Filtering Recommendation Algorithm Based on Item and Trust.....	ZHU Li-zhong, XU Xiu-juan, LIU Yu(58)
A Scalable Business Object Modeling Framework.....	CAO Min, WANG Lu(63)
Quantization Analysis of Program Locality.....	LIU Yang, AN Hong, DENG Bo-bin, et al(67)
Entity Retrieval Method Based on Multi-perspective Association Model.....	WANG Dong, NIU Jun-yu(71)
URL Attribute Integration Method Based on Link Path Search.....	MA Yan-hong, HU Xue-gang, WU Gong-qing(76)
Code Similarity Analysis Based on API Dependence Relation.....	YAO Xin-lei, PANG Jian-min, YUE Feng, et al(80)
LabVIEW-based Measurement Method of Energy Consumption for Embedded Software.....	GUO Zhen-lin, SANG Nan, JIANG Wei, et al(85)
Near MDR Codes over Ring $F_2 + vF_2$	LIU Xiu-sheng, LIU Hua-lu(89)
Research on Joint Preprocessing Method in Distributed CoMP Systems.....	YANG Jun, ZHANG Zheng-xiao, JIANG Zhan-jun(93)
Network Invulnerable Dynamic Evolution Model Based on HOT Theory.....	LIU Yuan-ni(97)
Energy-efficient Multihop Broadcast Clock Synchronization Algorithm for Wireless Sensor Networks.....
.....	QIN Xiu-ying, ZHENG Lin, HU Wen, et al(102)
Control Channel Modeling for MAC Protocol in Cognitive Radio Network.....	WANG Xiao-fei, ZHANG Xi, ZHANG Quan, et al(106)
Decomposition of Target-coverage Graph in Wireless Sensor Network.....	ZHANG Hong-wu, ZHANG Cong, FENG Hong-cai, et al(111)
Terminal Selection Algorithm Based on Cooperation of WLAN and Cellular Network.....	HU Tao-jun, HU Zheng, MIAO Jie(116)
Cooperative Spectrum Sensing Based on Reputation.....	ZHANG Xiao-yu, YUAN Ye, DU Rong, et al(120)
Research on P2P Streaming Media Service Scheme and Its Key Technologies.....	ZHANG Ming-jun, PENG Ya, YU Wen-jing(125)
Research on Impact of Packet Sampling on Anomaly Detection and Its Elimination Method.....
.....	YANG Yong-qiang, SHAO Chao, ZHANG Jian-hui(131)
A Blind Watermarking Algorithm for Vector Data Against Geometric Transformation Attack.....	WANG Yun-fei, ZHAO Jing, WANG Tuo, et al(136)
Analysis and Improvement of a Three-party Authenticated Key Agreement Protocol.....	TANG Zuo-bo, MIAO Xiang-hua(140)
Message Authentication Code Based on Point Function Obfuscator with Multi-bit Outputs.....	GONG Gao-xiang, YUAN Zheng, LI Chao(144)
Blind Watermarking Algorithm Based on Quaternion for Double Color Image.....	YAO Tao, SU Qing-tang, QUE Da-shun(149)

Analysis and Improvement of Grouping-proof Protocol for RFID Based on ECC.....	KANG Hong-yan(153)
A Location Privacy Protection Method Based on Anonymous Region Transformation.....	XIAO Yan-fang, XU Hong-yun(157)
A Provably Secure Two-party Password-authenticated Key Exchange Protocol.....	XIANG Shun-bo, PENG Zhi-ping, KE Wen-de(164)
Stability Analysis of Delay-independent Cellular Neural Network and Its Application in Secret Communication.....ZHANG Xiao-hong, LI De-yin(168)
Collaborative Filtering Algorithm Based on Rating Matrix Pre-filling.....	PENG Shi, ZHOU Zhi-bin, WANG Guo-jun(175)
An Improved Kernel-based Minimum Mean Square Error Algorithm and Its Application.....	ZHAO Ying-nan, WU Zhi, JIN Shi-wei(179)
Fuzzy Minimal Enclosing Ball Support Vector Machine.....	LIU Jian-hua, GONG Song-jie(183)
A Real-time Tracking Method Based on Object Segmentation.....	CHEN Lin-qiang, WANG Wen-bin, HE Yi-na(187)
Newton Algorithm of Twin Support Vector Regression.....	ZHENG Feng-de, ZHANG Hong-bin(191)
TV Symbol Recognition Based on Improved Chamfer Matching.....	HU Xing-huo, YAO Jian-min, LIN Zhi-xian, et al(195)
Face Detection Algorithm Based on Skin Color Model and Midline Localization.....	LIU Zai-ying, ZHU Lin-ling, YANG Ping(200)
Nonsmooth Nonnegative Matrix Factorization Algorithm Based on Particle Swarm Optimization.....DAI Hua-ping, WANG Xu, HU Hong-liang, et al(204)
Research and Application of Quantum Genetic Algorithm in Oral Implant Localization.....	HUANG Jun-hua, TANG Ping, CHEN Song-ling, et al(208)
Activity Recognition Method in Personal Exercise Management System.....	ZHAO Zhong-tang, MA Qian, CHEN Yi-qiang(213)
Improved Method of Sub-pixel Centre Detection in Circle Mark.....	XU Ce, MA Jie, ZHAO Quan-ming, et al(217)
Total Variation Image Denoising with Adaptive Shearlet Domain Restraint.....	ZHU Hua-sheng, DENG Cheng-zhi(221)
A Finger Vein Authentication Algorithm Based on Gradient Correlation.....	LIN Chun-yi, LI Ming-zhong, SUN Xiao(225)
A Fast Fractal Image Coding Method Based on Dictionary.....	SUN Yuan-yuan, KONG Rui-qing(230)
Computing Method of Plant Leaf Area Based on Snake Model.....	WANG Jing-wen, LIU Hong(234)
Application of Improved SIFT Algorithm in Text Image Matching.....	HU Hai-qing, TAN Jian-long, ZHU Ya-tao, et al(239)
Image Median Filtering Based on Quantum Theory.....	XIE Ke-fu, XU Wu-sheng(244)
Infrared Image Enhancement Algorithm Based on Arc-tangent Transform in Wavelet Domain.....	CHEN Jun, ZHANG Chang-jiang(248)
Image Fusion Quality Assessment Method Based on Watershed Algorithm.....	HUANG Ying-qing, QI Ou, JIANG Xiao-yu, et al(252)
Human-machine Verification of Mining Refuge Chamber's Assembly and Maintenance.....	LI Yuan-bin, SUN You-chao, ZHANG Yan-jun(256)
Struts 2 Framework Based on Mobile Agent.....	YANG Li, CHEN Li-xue, ZHAO Yong-qing, et al(260)
Design and Implementation of Data Transmission Management Method for Dynamic Reconfigurable Bus.....DENG Zhe, ZHANG Wei-gong, ZHU Xiao-yan, et al(264)
Research and Implementation of Schedulability Determination Tools in Complex Real-time System.....ZHANG Yong-yue, SUN Yu, LI Yun, et al(270)
Console Remote Interaction Model Based on I/O Buffer Read and Write.....	TANG Lei, SONG Yu-bo, LAN Zhi-ling(275)
Research and Improvement of Time Management Algorithm in High Level Architecture.....	WANG Yue, LI Hong-wei, SUN Li-yang(279)
Calibration Technology of Line-scan Cameras Based on Quadratic Curves.....	LIU Ren-feng, GONG Jun-bin, TIAN Jin-wen(283)
Information System for Water Quality Monitoring of Lakes and Reservoirs and Water-bloom Early-warning.....HAO Qi-wen, WANG Xiao-yi, XU Ji-ping, et al(287)
Conflict Evidence Synthesis Method Based on Confidence Distance.....	PAN Kai, LI Hui, XING Gang(290)
Multi-label Classification Based on Sphere Structured SVM.....	JIANG Hua, QI Yu-shun(294)
Scalable Coding System of Multi-view Video Based on Wavelet Transform.....	JIN Xue-song, ZHAO Zhi-jie, LIN Mao-liu(298)
Study of Parallel Scheduling Algorithm for Real-time Simulation.....	JIA Yan-cheng, LI Ying(303)
Improved Gene Copy Number Variation Detection Algorithm.....	LI Ping, YANG Hong-bin, WU Yue(309)
Analysis and Utilization of Flaw for IES.0 Login Information Protection Mechanism.....	ZHANG Hang, WU Hao, XU Rong(313)
Design and Simulation of H.264 High Definition Encoder System.....	WANG Shao-wei, ZHOU Li, SUN Tao, et al(318)