

- ❖ 英国《科学文摘》(INSPEC)来源期刊
- ❖ 俄罗斯《文摘杂志》(AJ)来源期刊
- ❖ 美国《乌利希期刊指南(网络版)》(Ulrichsweb)收录期刊
- ❖ 第二届国家期刊奖百种重点科技期刊
- ❖ 中国科技核心期刊 ❖ 全国中文核心期刊
- ❖ 中国科技论文统计源期刊
- ❖ 中国学术期刊综合评价数据库来源期刊
- ❖ RCCSE 核心学术期刊 ❖ 中国期刊方阵双效期刊
- ❖ 《中国工程技术电子信息网》来源期刊
- ❖ 《日本科学技术振兴机构数据库》(JST)来源期刊
- ❖ 美国《史蒂芬斯数据库》(EBSCOhost)全文来源期刊
- ❖ 美国《剑桥科学文摘(自然科学)》(CSA(NS))来源期刊
- ❖ 波兰《哥白尼索引》(IC)来源期刊
- ❖ 中国科学引文数据库来源期刊
- ❖ 《中文科技期刊数据库》来源期刊
- ❖ 《中国期刊网》《中国学术期刊(光盘版)》来源期刊
- ❖ 台湾《中文电子期刊服务(CEPS)资料库》全文收录期刊
- ❖ 《电子科技文献数据库》来源期刊

计算机应用研究

Jisuanji Yingyong Yanjiu

第31卷 第1期 2014年1月

目 次

综述评论

- | | | |
|------------------------|-------|----------------------|
| 硬件虚拟化 rootkit 检测方法研究综述 | ..... | 施江勇,王会梅,鲜明,荣宏,金从军(1) |
| 超像素分割算法研究综述 | ..... | 王春瑶,陈俊周,李炜(6) |
| 全参考图像质量评价综述 | ..... | 褚江,陈强,杨曦晨(13) |
| 代理重签名研究进展 | ..... | 陈亮,陈性元,孙奕,杜学绘(23) |
| 社会网络分析在政府间国际组织研究中的应用 | ..... | 刘建胜,封孝生,何晚辉,李立波(28) |

算法研究探讨

- | | | |
|-----------------------------------|-------|-----------------------|
| 基于平衡采样的轻量级广告点击率预估方法 | ..... | 施梦圆,顾津吉(33) |
| 基于噪点抑制的聚类有效性评价函数构建 | ..... | 翟丽丽,张雪,彭定洪,李艳来(37) |
| 基于句法分析的汉语词义消歧 | ..... | 张春祥,宋博,高雪瑶,卢志茂(40) |
| 基于时间特性的微博热门话题检测算法研究 | ..... | 闫光辉,赵红运,任亚缙,陈勇(43) |
| 基于 agent 的蚁群觅食行为建模及在机器人路径规划问题中的应用 | ..... | 柏继云,李士勇(47) |
| 基于模糊 PA 算法的微博信息传播分享预测研究 | ..... | 田占伟,刘臣,王磊,隋场(51) |
| 基于 DSM 和 GA 的消费者感性需求聚类 | ..... | 杨延璞,余隋怀,陈登凯,李博,戚彬(55) |
| 时滞基因调控网络的全局渐进稳定性分析 | ..... | 吴海霞,冯伟,冉维(59) |
| 基于概率神经网络和 K-L 散度的样例选择 | ..... | 翟俊海,李畅,李塔,王熙照(63) |
| 自动修复短时序违反路径的 FPGA 布线算法 | ..... | 刘洋,杨海钢,喻伟,蔡刚,徐维涛(66) |
| 外电场作用下神经元网络同步特性 | ..... | 于凯,王江,邓斌,魏熙乐(70) |
| 游戏引擎最短路径搜索优化遗传算法设计 | ..... | 黎忠文,覃志东,王全宇,倪仲余(76) |
| 异构集群下的任务调度算法研究 | ..... | 刘莉,姜明华(80) |
| 云计算环境下基于用户满意度的遗传算法 | ..... | 邹伟明,于炯(85) |
| 一种基于统计学判别分析的老人摔倒检测算法的研究 | ..... | 金纯,尹远阳(89) |
| 分段自相关频率估计算法研究 | ..... | 张晓威,李洋洋,孟凡明(92) |
| FastICA 和 RobustICA 算法在盲源分离中的性能分析 | ..... | 吴微,彭华,张帆(95) |
| 一种邻域线性竞争的排列降维方法 | ..... | 闫德勤,吕志超,刘胜蓝(99) |
| 基于引用启发式和 URL 语义相结合的会话识别方法 | ..... | 张帅,陈兴蜀,童浩,崔晓婧(102) |
| 基于坡度的鲁棒优化方法 | ..... | 杨朝,戴光明,彭雷,王茂才(106) |
| 一种基于模糊 Petri 网的 CGF 决策方法研究 | ..... | 陈坚,廖守亿,杨艳丽,张金生(111) |
| 基于平均偏离度的证据组合方法 | ..... | 曹洁,郭雷雷,李伟,吴迪(115) |
| 基于反传混沌粒子群训练的前馈神经网络研究 | ..... | 朱群雄,董春岩,林晓勇(120) |
| 基于改进差分进化算法的非线性系统模型参数辨识 | ..... | 熊伟丽,陈敏芳,张乾,徐保国(124) |
| 基于统计特征的不等长间歇过程故障诊断研究 | ..... | 郭金玉,赵璐璐,李元(128) |
| 基于中介中心度的微博影响力个体发现 | ..... | 朱静宜(131) |
| 空间资源索引与 top-k 查询研究 | ..... | 于世龙,黄宏斌,邓苏(134) |

系统应用开发

- | | | |
|-----------------------------|-------|-----------------------------|
| 基于 OGC 规范的多星多传感器卫星地面系统设计与实现 | | 杨中,李国庆,解吉波,于文洋,邓红帅,雷星松(137) |
|-----------------------------|-------|-----------------------------|

基于定时谓词变迁系统客运专线区间通用模型及仿真	李 望,倪少权(141)
一种带有负载均衡的军事信息服务聚合模型	沈 迪,李建华,张 强,朱 瑞(147)
基于博弈视角的交通信息提供与道路收费联合定价模型	袁鹏程,雋志才(152)
基于概念设计阶段的解耦模式车门截面形状优化方法	苏 盲,王 虹(157)
车辆出行轨迹调查分析中的丢点轨迹还原	王龙飞,陈 红,李 杨,邓亚娟(162)
考虑广告投入影响的再制造闭环供应链优化决策博弈模型研究	初叶萍,张曙红(166)

软件技术研究

代码缺陷与代码味道的自动探测与优化研究	刘 伟,刘宏韬,胡志刚(170)
基于变异技术的程序故障自动化修复方法	马春燕,刘 杰,赖文豫(177)
基于数据局部性的推测式 Hadoop 任务调度算法研究	刘 奎,刘向东,马宝来,王翠荣(182)
基于二叉树搜索空间缩减的测试数据生成	邵 楠,周雁舟,惠文涛,乔 辉(188)
Twitter 的 Follow 关系和 Retweet 关系对比	曾 雪,吴 跃(192)

信息安全技术

可抵御唯密文攻击的基于格的公钥加密	李 君(196)
WSN 中一种轻量级和高安全性的密钥管理方案	曾 萍,张 历,杨亚涛,刘宇新,储 旭(199)
加权条件熵在异常检测中的应用	范晓诗,李成海(203)
一个可追踪身份的门限属性签名方案	行韩睿,卢万谊,魏立线,韩益亮(206)
基于证书的抗泄露的安全加密方案	于启红,李继国(210)
可否认的基于属性的指定证实人签名方案	任 燕,唐春明(213)
一种基于免疫入侵检测的攻击路径标志技术研究	张凤斌,孙 刚,张 斌(217)
MDS 矩阵和对合 MDS 矩阵的新构造方法	郭 磊,郑浩然,傅增强,王 月(222)
VANET 中基于不经意传输和群签名的强隐私保护方案	朱晓玲,陆 阳,侯整风,朱晓娟(226)
一种虚拟机访问控制安全模型	梁 彪,秦中元,沈日胜,陈 琦,吕 游,强 勇,郭爱文(231)

网络与通信技术

基于层级的水下传感器网络自适应地理路由协议	兰胜林,杜秀娟,柳 凡,冯振兴(236)
基于优化缓存模型的 IPQAM 频点管理方法研究	鞠照明,王玲芳,刘 磊(239)
无线传感网中一种改进的分布式数据聚集调度算法	刘文彬,刘红冰,付 沙,文志强(243)
基于平均传递概率的容迟网络路由算法的设计	吕杰林,张珊珊(248)
无线传感器网络中基于网格信任度的可靠覆盖算法研究	董书豪,李小龙(253)
基于禁位排列原理的路由决策算法	史 岚,吕建辉(257)
基于后缀摘要的可选下一跳转发信息表聚合的方法	杜传震,田 铭,兰巨龙(261)
6LoWPAN 无线传感器网络移动管理方案	王晓哺,钱焕延(266)
一种基于 EM-MAP 的联合 CFO 双选信道估计算法	田 玮,钟子发,葛梅宝(269)

图形图像技术

增量学习语义属性的图像内容检索系统增强	丁学东,刘 涵,谢振平(273)
融合 LLE 和 ISOMAP 的非线性降维方法	张少龙,巩知乐,廖海斌(277)
基于先验知识的肝脏轮廓线提取算法研究	王小东,冯 笛,鲁定国,李 展,韩 鑫(281)
基于 Kinect 的深度数据融合方法	呙 维,胡 涛,朱欣焰(285)
基于 Gabor 多尺度空间的不变兴趣点检测	谢 锦,蔡自兴,汪鲁才(289)
基于全局颜色对比的显著性目标检测	杨 军,林士胜,肖应旺(292)
基于仿射不变闭合区域和 SURF 的图像匹配算法	杜 杰,刘亚秋,孙 壤(295)
基于正交 SRDA 和 SRKDA 的人脸识别	陈达遥,陈秀宏,董昌剑(299)
基于暗原色的单一图像去雾算法的研究	和晓军,乔 寅(304)
基于有限状态自动机的人眼开度 PERCLOS 实现算法	巩晓倩,蒲亦非,杨智勇,周激流(307)
基于 LLE 和 KRR 的人体动作重构算法研究	刘 剑,龚志恒,吴成东,高恩阳(311)
基于各向异性滤波和空间 FCM 的 MRI 图像分割方法	曾文权,何拥军,崔晓坤(316)

信息集萃

下期要目	(88)
------	------

期刊基本参数:CN51-1196/TP * 1984 * m * A4 * 320 * zh * P * ￥35.00 * 3840 * 75 * 2014-1 * n

本期责任编辑 何 俐,黄 莉,傅 奕

Application Research of Computers

Vol. 31 No. 1 Jan. 2014

Contents

Survey

Summarize of detection methods on hardware-based virtualization machine rootkit	SHI Jiang-yong, WANG Hui-mei, XIAN Ming, et al. (1)
Review on superpixel segmentation algorithms	WANG Chun-yao, CHEN Jun-zhou, LI Wei(6)
Review on full reference image quality assessment algorithms	CHU Jiang, CHEN Qiang, YANG Xi-chen(13)
Survey of proxy re-signature technology	CHEN Liang, CHEN Xing-yuan, SUN Yi, et al. (23)
Application of social network analysis in research of intergovernmental organizations	LIU Jian-sheng, FENG Xiao-sheng, HE Wan-hui, et al. (28)

Algorithm Research & Explorer

Balance-sampling based light-weighted advertisement CTR prediction method	SHI Meng-yuan, GU Jin-ji(33)
Construction of clustering validity evaluation function based on noise suppression	ZHAI Li-li, ZHANG Xue, PENG Ding-hong, et al. (37)
Chinese word sense disambiguation based on parsing analysis	ZHANG Chun-xiang, LUAN Bo, GAO Xue-yao, et al. (40)
Detection algorithm research for hot topics in micro-blog based on time characteristics	YAN Guang-hui, ZHAO Hong-yun, REN Ya-jin, et al. (43)
Modeling of ant colony foraging behavior based on agent and application of model in robotic path planning	BAI Ji-yun, LI Shi-yong(47)
Research on prediction of micro-blog information dissemination based on PA algorithm	TIAN Zhan-wei, LIU Chen, WANG Lei, et al. (51)
Consumer's perceptual needs clustering based on DSM and GA	YANG Yan-pu, YU Sui-huai, CHEN Deng-kai, et al. (55)
Further analysis on global asymptotical stability of genetic regulatory networks with time delays	WU Hai-xia, FENG Wei, RAN Wei(59)
Instance selection based on probabilistic neural network and K-L divergence	ZHAI Jun-hai, LI Chang, LI Ta, et al. (63)
Automatic repairing short-path violations FPGA routing algorithm	LIU Yang, YANG Hai-gang, YU Wei, et al. (66)
Synchronizing characteristics of neural network subject to external electric field	YU Kai, WANG Jiang, DENG Bin, et al. (70)
Optimized genetic algorithm for shortest-path problem in game engine	LI Zhong-wen, QIN Zhi-dong, WANG Quan-yu, et al. (76)
Research of task scheduling algorithm on heterogeneous cluster	LIU Li, JIANG Ming-hua(80)
Consumer satisfaction genetic algorithm in cloud computing	ZOU Wei-ming, YU Jiong(85)
Old man fall detection algorithm research based on discriminant analysis of statistical	JIN Chun, YIN Yuan-yang(89)
Research of segmented autocorrelation frequency estimation algorithm	ZHANG Xiao-wei, LI Yang-yang, MENG Fan-ming(92)
Performance analysis of FastICA and RobustICA on blind sources separation	WU Wei, PENG Hua, ZHANG Fan(95)
Neighborhood linear rival alignment dimensionality reduction algorithm	YAN De-qin, LV Zhi-chao, LIU Sheng-lan(99)
Methodology for session identification based on combination of referenced heuristic and URL-semantic	ZHANG Shuai, CHEN Xing-shu, TONG Hao, et al. (102)
Robust optimization method based on slope	YANG Zhao, DAI Guang-ming, PENG Lei, et al. (106)
Decision-making method of computer generated forces based on fuzzy Petri-net	CHEN Jian, LIAO Shou-yi, YANG Yan-li, et al. (111)
New evidence fusion method based on average deviation	CAO Jie, GUO Lei-lei, LI Wei, et al. (115)
Research of training feedforward neural networks based on hybrid chaos particle swarm optimization-back-propagation	ZHU Qun-xiong, DONG Chun-yan, LIN Xiao-yong(120)
Parameter estimation of nonlinear systems model based on improved differential evolution	XIONG Wei-li, CHEN Min-fang, ZHANG Qian, et al. (124)
Fault diagnosis for uneven-length batch processes based on statistic features	GUO Jin-yu, ZHAO Lu-lu, LI Yuan(128)
Centrality based microblog influence entity discovery	ZHU Jing-yi(131)
Spatial resource index and top- k query research	YU Shi-long, HUANG Hong-bin, DENG Su(134)

System Development & Application

Design and implementation of multi-satellites ground systems based on OGC service standards	YANG Zhong, LI Guo-qing, XIE Ji-bo, et al. (137)
General model and simulation on passenger-dedicated line section based on timed predicate/transition-system	LI Wang, NI Shao-quan(141)
Load balancing composition model for military information service	SHEN Di, LI Jian-hua, ZHANG Qiang, et al. (147)
Union pricing mechanism of traffic information and road congestion based on game theory perspective	YUAN Peng-cheng, JUAN Zhi-cai(152)

Decoupling mode-based shape optimization method for vehicle door in conceptual design stage	SU Xuan, WANG Hu(157)
Track patching method for incomplete track in track-oriented traffic survey and analysis	WANG Long-fei, CHEN Hong, LI Yang, et al. (162)
Research on optimal decision game models of closed-loop supply chain considering influence of advertising investment	
.....	CHU Ye-ping, ZHANG Shu-hong(166)

Software Technology Research

Automated detection and optimization research on code defects and code smells	LIU Wei, LIU Hong-tao, HU Zhi-gang(170)
Method for repairing program automatically with mutation	MA Chun-yan, LIU Jie, LAI Wen-yu(177)
Speculative task scheduling algorithm based on locality of data in Hadoop	LIU Kui, LIU Xiang-dong, MA Bao-lai, et al. (182)
Test data generation based on binary tree search space reduction	SHAO Nan, ZHOU Yan-zhou, HUI Wen-tao, et al. (188)
Comparison between Follow and Retweet on Twitter	ZENG Xue, WU Yue(192)

Technology of Information Security

Lattice-based public-key encryption with resistance of ciphertext-only attack	LI Jun(196)
Lightweight and high security key management for wireless sensor networks	ZENG Ping, ZHANG Li, YANG Ya-tao, et al. (199)
Application of weighted conditional entropy in anomaly detection	FAN Xiao-shi, LI Cheng-hai(203)
Identify traceable threshold attribute-based signature scheme	XING Han-rui, LU Wan-yi, WEI Li-xian, et al. (206)
Secure certificate-based encryption against entropy and key leakage	YU Qi-hong, LI Ji-guo(210)
Deniable attribute-based designated confirmer signature	REN Yan, TANG Chun-ming(213)
Technology research of attack path identification based on immune intrusion detection	ZHANG Feng-bin, SUN Gang, ZHANG bin(217)
New construction methods for MDS matrices and involution MDS matrices	GUO Lei, ZHENG Hao-ran, FU Zeng-qiang, et al. (222)
Strong privacy protection scheme based on oblivious transfer and group signature in VANET	ZHU Xiao-ling, LU Yang, HOU Zheng-Feng, et al. (226)
Access control security model for virtual machines	LIANG Biao, QIN Zhong-yuan, SHEN Ri-sheng, et al. (231)

Technology of Network & Communication

Level-based adaptive geo-routing for underwater sensor network	LAN Sheng-lin, DU Xiu-juan, LIU Fan, et al. (236)
Research of IPQAM resource management method based on optimal cache model	JU Zhao-ming, WANG Ling-fang, LIU Lei(239)
Improved distributed data aggregation scheduling algorithm in WSNs	LIU Wen-bin, LIU Hong-bing, FU Sha, et al. (243)
Design of DTN routing algorithm based average delivery probability	LV Jie-lin, ZHANG Shan-shan(248)
Research on reliable coverage algorithm based on grid trust value for wireless sensor networks	DONG Shu-hao, LI Xiao-long(253)
Routing decision algorithm based on limit arrangement	SHI Lan, LV Jian-hui(257)
Nexthop-selectable aggregation based on suffix digest for forwarding information base	DU Chuan-zhen, TIAN Ming, LAN Ju-long(261)
Mobility management for 6LoWPAN wireless sensor networks	WANG Xiao-nan, QIAN Huan-yan(266)
Joint carrier frequency offset and double selective channel estimation based on EM-MAP algorithm	TIAN Wei, ZHONG Zi-fa, GE Mei-bao(269)

Technology of Graphic & Image

Improvement of content-based image retrieval system by incrementally learning semantic attributes of images	
.....	DING Xue-dong, LIU Yuan, XIE Zhen-ping(273)
Nonlinear dimensionality reduction method by fusing LLE and ISOMAP	ZHANG Shao-long, GONG Zhi-le, LIAO Hai-bin(277)
Liver contour extraction based on priori knowledge model	WANG Xiao-dong, FENG Jun, LU Ding-guo, et al. (281)
Kinect-based depth image fusion method	GUO Wei, HU Tao, ZHU Xin-yan(285)
Interest point detection based on Gabor multiscale-space	XIE Jin, CAI Zi-xing, WANG Lu-cai(289)
Salient objects detection based on global color contrast	YANG Jun, LIN Tu-sheng, XIAO Ying-wang(292)
Image matching algorithm based on affine-invariant closed region and SURF	DU Jie, LIU Ya-qi, SUN Yao(295)
Face recognition based on orthogonal SRDA and SRKDA	CHEN Da-yao, CHEN Xiu-hong, DONG Chang-jian(299)
Research on single image defogging algorithm based on dark primary colors	HE Xiao-jun, QIAO Yin(304)
PERCLOS implementation computing method of eye open degree based on finite state machine	
.....	GONG Xiao-qian, PU Yi-fei, YANG Zhi-yong, et al. (307)
Research human action reconstruction based on LLE and KRR	LIU Jian, GONG Zhi-heng, WU Cheng-dong, et al. (311)
MRI image segmentation method based on anisotropic diffusion and spatial FCM	ZENG Wen-quan, HE Yong-jun, CUI Xiao-kun(316)