

❖ 英国《科学文摘》(INSPEC)来源期刊  
 ❖ 俄罗斯《文摘杂志》(AJ, VINITI)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《史蒂芬斯全文数据库》(EBSCOhost)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)(2006-2011年)来源期刊  
 ❖ 中国科学引文数据库(CSCD)2015-2016 核心期刊  
 ❖ 《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 32 卷 第 11 期 2015 年 11 月

## 目 次

#### 综述评论

基于角色的访问控制模型安全性分析研究综述 .....	熊厚仁, 陈性元, 杜学绘, 王义功(3201)
同态加密研究进展综述 .....	李 浪, 余孝忠, 杨娅琼, 郑兰兰(3209)
互联网流量的演化研究 .....	张泽鑫, 李 俊, 常向青(3215)

#### 算法研究探讨

基于自适应机制的遗传算法研究 .....	曲志坚, 张先伟, 曹雁锋, 刘晓红, 冯晓华(3222)
基于改进蝙蝠算法的背包问题求解 .....	李佩泽, 王姗姗, 樊 岩(3226)
基于改进粒子群算法的云计算平台资源调度 .....	王德文, 刘晓萌(3230)
基于流行度的非平衡热传导推荐算法研究 .....	侯 磊, 胡兆龙, 张 博, 刘建国(3235)
基于 Nyström 扩展谱聚类的社会化推荐算法 .....	李振博, 徐桂琼, 查 九(3238)
基于高斯密度的一阶贝叶斯衍生分类器 .....	杜瑞杰, 王双成, 高 瑞(3242)
基于加权联合矩阵的演化聚类算法 .....	周松华, 欧阳春娟(3247)
基于重建系数的子空间聚类融合算法 .....	许 凯, 吴小俊(3252)
分步预测的协同过滤算法 .....	肖明波, 郑鑫炜(3256)
基于 BSP 和动态规划的大规模空域扇区分割 .....	王 超, 陈 昱(3259)
基于粒度计算的减量式隐私保护数据挖掘 .....	程舒通, 徐从富, 但红卫(3264)
基于云端任务合并的绿色功率控制算法研究 .....	李卫平, 王 钢, 杨 杰(3269)
求解 0-1 背包问题的双种群果蝇优化算法 .....	李 栋, 张文宇(3273)
基于混合威布尔分布的加工中心可靠性评估 .....	张根保, 杨兴勇, 李 磊, 李冬英(3278)
空间碎片探测软件的并行化及 WCRT 分析 .....	康少华, 古志民, 付引霞, 安立奎(3283)
一种融合位置信息的字符串相似度度量方法 .....	肖 雨, 崔荣一, 怀丽波(3287)
基于归档集特性的自适应多目标粒子群优化算法 .....	王 强, 郑力明(3291)
一种人工蜂群算法改进方案 .....	梁 静, 葛 宇, 冉晓娟, 李 琦(3295)
一种改进的流程图相似度检索算法及实现 .....	余兴华, 仲梁维(3300)
基于贪心程度和区域界定的预期效率模型求解 0-1 背包问题 .....	苏爱东, 高维珉, 张永翼(3304)
异时滞混沌系统的延时同步控制及电路仿真 .....	程 鹏, 卢 娟(3309)
基于 MapReduce 的序列模式挖掘算法 .....	余 啸, 马传香, 李伟亮, 金 聪(3312)
考虑点和线的有向无环网络连通可靠性研究 .....	崔铁军, 马云东(3315)

#### 软件技术研究

基于 OMKast 的术语关系获取和验证 .....	王娜娜, 黄运有, 唐素勤, 王 石, 曹存根(3319)
基于 PU 学习的软件故障检测研究 .....	张 荷, 李 梅, 张 阳, 蔡晓妍(3324)
基于蚁群算法的三三组合测试用例集的生成 .....	王小银, 王曙燕, 孙家泽(3328)
文档转换器变更影响分析与测试用例优化方法 .....	白倩倩, 牟永敏(3332)

#### 系统应用开发

利用 CBIA 与 WSN 构建的植物叶片分类系统 .....	李 晨, 姚 玮, 韩忠伟, 高一鸿, Florian Schmidt, 蒋 涛, 丁惠君, 王振宇, 申旻旻(3336)
---------------------------------	---

混合蚁群算法在非线性谐波平衡分析中的应用 .....	刘文进,丛日静,南敬昌,李冬梅(3341)
基于演化版本的 Deep Web 查询接口维护方法 .....	束长波,施化吉,王 基(3345)
基于改进 Solis&Wets 算法的 PID 参数自整定 .....	白国振,荆鹏翔,骆艳洁(3349)
考虑节点间不同连通性要求的公路交通网布局优化模型研究 .....	熊 巧(3352)

### 网络与通信技术

改进的无线传感器网络节点虚拟力部署方法 .....	张 涛,余翔宇,蓝俊健,黄伟鹏(3356)
异质传感网络中基于目标轨迹的覆盖性能研究 .....	秦宁宁,郑 欣,吴宏杰,徐保国(3359)
一种 Macro-Pico 异构网络基于博弈的小区选择算法 .....	李 锋,耿莉娜,朱世华(3364)
一种基于蚁群算法的云存储副本动态选择机制研究 .....	左 方,何 欣(3368)
仿射传播聚类算法和稀疏贝叶斯的网络流量预测模型 .....	赵启升,李存华(3371)
一种面向延迟容忍的星间链路数据转发算法 .....	张 毅,杜学绘,徐国愚,施小武(3375)
一种基于预测的自适应机会网络消息转发策略 .....	梁 泉,贺文武,张永晖(3379)
面向用户 QoE 的移动 IPTV 视频质量优化算法 .....	曾文娟,高海波,王 菁(3383)
基于质量评价及需求匹配的制造设备云服务选择 .....	赵秋云,魏 乐,舒红平(3387)
一种自适应调制的鱼群优化部分传输序列算法 .....	祝杨坤,达新宇,张亚普,王 舒(3391)
基于动态分簇的 DTN 路由算法 .....	钟 赟,夏靖波,付 凯,柏 骏,张毅卜(3395)
基于语义的物流云服务发现技术研究 .....	张水旺,王 涌,胡小建(3399)
OFDM 信号中保护间隔样式的识别方法 .....	张孟伯,杨晓静,张欣冉,张 岱(3404)
云数据中心多虚拟机并行迁移带宽重分配策略 .....	何 利,李付荣(3408)

### 信息安全技术

矩阵奇异值和矩阵范数的保密计算服务协议 .....	刘 新,李顺东,陈振华,王艳超(3413)
信息中心网络架构 NetInf 安全性改进研究 .....	刘解放,赵 斌,周 宁(3416)
面向云计算的网络安全风险预测模型的研究 .....	郭祖华,李扬波,徐立新,张 晓(3421)
对一个无证书签密方案的分析与改进 .....	秦艳琳,吴晓平(3426)
高效的三方量子秘密直接共享方案 .....	张晓倩,谭晓青,梁 翠(3430)
一种基于完备拉丁方的图像加密算法 .....	杨刘洋,吕 翔(3435)
基于敏感点覆盖的恶意代码检测方法 .....	秦艳锋,王清贤,曾勇军,奚 琪(3439)
一种提高链路层加密比特流识别率的新方法 .....	邢 萌,王 韬,吴 杨,李进东(3443)
一种较快速的基于整数的全同态加密方案 .....	代洪艳,丁 勇,吕海峰,高 雯(3448)
VANETs 中 beacon 的传输攻击实时检测算法 .....	陈 丹,彭利民(3452)
一种快速评估 DDoS 攻击对 DNS 权威服务影响的方法 .....	潘蓝兰,尉迟学彪,胡安磊(3456)

### 图形图像技术

基于问题分解的二维几何约束优化求解 .....	高雪瑶,张春祥,卢志茂(3460)
基于主动特征选择的在线加权多实例目标跟踪 .....	孙百伟,陈秀宏,钱 凯(3463)
光照不均匀图像的阈值分割 .....	王 仲,郑镛浩,付鲁华,苟建松(3467)
基于 MRF 的半自动肾皮质三维分割算法 .....	时永刚,陈 庆,祝 峰,刘志文(3471)
基于边界沙包核函数的 Mean-Shift 跟踪算法 .....	曹义亲,肖金胜,黄晓生(3475)
基于加权排序检索和视觉模式挖掘的商标识别 .....	刘 石,宋 砚(3480)
引入极化方位角特征的极化 SAR 图像分类 .....	王剑波,王 超,张 红,吴 樊(3484)
一种鲁棒的高精度摄像机标定方法 .....	文 涛,左东广,李忠科,李站良,于为中(3489)
基于均值偏移和区域映射的视差图优化算法 .....	张惊雷,吉 玲(3492)
新的解决大平移抖动的车载图像电子稳像算法 .....	张轶飞,马 娜(3496)
低分辨率图像眼睛精确定位方法 .....	徐国庆(3501)
基于差分纹理的人脸表情识别 .....	夏海英,徐鲁辉(3504)
基于全局和局部外观的视觉跟踪算法研究 .....	黄会群(3508)
GPU 快速解压的多分辨率地形高程数据压缩算法 .....	张兵强,姜本清,方 君(3513)
基于虚拟样本的协同表示人脸识别算法 .....	张哲来,马小虎(3518)

### 信息集萃

下期要目 .....	(3344)
------------	--------

期刊基本参数:CN51-1196/TP \* 1984 \* m \* A4 \* 320 \* zh \* P \* ¥35.00 \* 3840 \* 75 \* 2015-11 \* n

本期责任编辑 洪志全

# Application Research of Computers

Vol. 32 No. 11 Nov. 2015

## Contents

### Survey

- Survey of security analysis for role-based access control ..... Xiong Houren, Chen Xingyuan, Du Xuehui, *et al.* (3201)  
Survey on homomorphic encryption technology ..... Li Lang, Yu Xiaozhong, Yang Yaqiong, *et al.* (3209)  
Longitudinal study on evolution of Internet traffic ..... Zhang Zexin, Li Jun, Chang Xiangqing (3215)

### Algorithm Research & Explore

- Research on genetic algorithm based on adaptive mechanism ..... Qu Zhijian, Zhang Xianwei, Cao Yanfeng, *et al.* (3222)  
Solution of knapsack problem based on improved bat algorithm ..... Li Peize, Wang Shanshan, Fan Yan (3226)  
Resource scheduling of cloud computing platform based on improved particle swarm optimization ..... Wang Dewen, Liu Xiaomeng (3230)  
Information filtering via non-equilibrium heat conduction with consideration of popularity ..... Hou Lei, Hu Zhaolong, Zhang Bo, *et al.* (3235)  
Social recommendation algorithm based on spectral clustering with Nyström extension ..... Li Zhenbo, Xu Guiqiong, Zha Jiu (3238)  
First-order Bayesian derivative classifier based on Gaussian density ..... Du Ruijie, Wang Shuangcheng, Gao Rui (3242)  
Weighted co-association matrix oriented evolutionary clustering ..... Zhou Songhua, Ouyang Chunjuan (3247)  
Reconstruction coefficients based subspace clustering combination algorithm ..... Xu Kai, Wu Xiaojun (3252)  
Collaborative filtering algorithm with stepwise prediction ..... Xiao Mingbo, Zheng Xinwei (3256)  
Large-scale airspace sector partitioning based on binary space partitions and dynamic programming ..... Wang Chao, Chen Yu (3259)  
Decreasing privacy preserving data mining based on granular computing ..... Cheng Shutong, Xu Congfu, Dan Hongwei (3264)  
Green power control algorithm based on cloud task consolidation ..... Li Weiping, Wang Gang, Yang Jie (3269)  
Double subgroups fruit fly optimization algorithm for solving 0-1 knapsack problem ..... Li Dong, Zhang Wenyu (3273)  
Reliability evaluation of machining center based on mixed Weibull distribution ..... Zhang Genbao, Yang Xingyong, Li Lei, *et al.* (3278)  
Parallelization and WCRT analysis of space debris detector-DEBIE ..... Kang Shaohua, Gu Zhimin, Fu Yinxia, *et al.* (3283)  
New method for calculating string similarity fusing location information ..... Xiao Yu, Cui Rongyi, Huai Libo (3287)  
Adaptive multi-objective particle swarm optimization algorithm based on archive properties ..... Wang Qiang, Zheng Liming (3291)  
Improved artificial bee colony algorithm ..... Liang Jing, Ge Yu, Ran Xiaojuan, *et al.* (3295)  
Improved business process similarity retrieval algorithm and realization ..... Yu Xinghua, Zhong Liangwei (3300)  
Solving 0-1 knapsack problem by greedy degree and improved expectation efficiency model based on region limitation .....  
..... Su Aidong, Gao Weimin, Zhang Yongyi (3304)  
Lag synchronization of different time-delay chaotic system and its circuit simulation ..... Cheng Peng, Lu Juan (3309)  
Sequential pattern mining algorithm based on MapReduce programming framework ..... Yu Xiao, Ma Chuanxiang, Li Weiliang, *et al.* (3312)  
Research for connectivity reliability of directed acyclic network considering nodes and lines ..... Cui Tiejun, Ma Yundong (3315)

### Software Technology Research

- Term relationship acquisition and verification based on OMKast ..... Wang Nana, Huang Yunyou, Tang Suqin, *et al.* (3319)  
Research of software fault prediction based on PU learning ..... Zhang He, Li Mei, Zhang Yang, *et al.* (3324)  
Building three-way interaction combinatorial test suites with ant colony optimization ..... Wang Xiaoyin, Wang Shuyan, Sun Jiaze (3328)  
Change impact analysis and test cases optimization method on document converter ..... Bai Qianqian, Mu Yongmin (3332)

### System Development & Application

- Plant leaf classification system using CBIA and WSN ..... Li Chen, Yao Wei, Han Zhongwei, *et al.* (3336)  
Application of hybrid ant colony algorithm in nonlinear harmonic balance analysis ..... Liu Wenjin, Cong Rijiang, Nan Jingchang, *et al.* (3341)  
Deep Web search interface maintenance method based on evolution version ..... Shu Changbo, Shi Huaji, Wang Ji (3345)  
Self-tuning of PID parameters based on modified Solis&Wets algorithm ..... Bai Guozhen, Jing Pengxiang, Luo Yanjie (3349)

Optimization model of highway network layout considering different requirement of connectivity between pairs of nodes ..... Xiong Qiao(3352)

### Technology of Network & Communication

Improved virtual force-based node deployment approach in wireless sensor networks ..... Zhang Tao, Yu Xiangyu, Lan Junjian, *et al.* (3356)  
Coverage performance study based on target trajectory for heterogeneous sensor networks ..... Qin Ningning, Zheng Xin, Wu Hongjie, *et al.* (3359)  
New scheme of game-theoretic based cell selection in Macro-Pico heterogeneous networks ..... Li Feng, Geng Lina, Zhu Shihua (3364)  
Pheromone-based ant colony replica selection mechanism in cloud storage ..... Zuo Fang, He Xin (3368)  
Network flow prediction model based on affinity propagation clustering algorithm and sparse Bayesian ..... Zhao Qisheng, Li Cunhua (3371)  
Satellite links data forwarding algorithm oriented delay tolerant ..... Zhang Yi, Du Xuehui, Xu Guoyu, *et al.* (3375)  
Prediction-based strategy of message adaptive forwarding for opportunistic networks ..... Liang Quan, He Wenwu, Zhang Yonghui (3379)  
Mobile IPTV video quality optimization algorithm for user's QoE ..... Zeng Wenjuan, Gao Haibo, Wang Jing (3383)  
Selection of manufacturing equipment cloud service based on quality evaluation and requirement matching ..... Zhao Qiuyun, Wei Le, Shu Hongping (3387)  
Adaptive modulate artificial fish school optimized PTS algorithm ..... Zhu Yangkun, Da Xinyu, Zhang Yapu, *et al.* (3391)  
Dynamic cluster-based routing algorithm in DTN ..... Zhong Yun, Xia Jingbo, Fu Kai, *et al.* (3395)  
Logistics cloud service discovery technology research based on semantics ..... Zhang Shuiwang, Wang Yong, Hu Xiaojian (3399)  
Recognition method to style of guard intervals in OFDM signal ..... Zhang Mengbo, Yang Xiaojing, Zhang Xinran, *et al.* (3404)  
Bandwidth reallocation strategy for parallel migration of multiple virtual machines in cloud data center ..... He Li, Li Furong (3408)

### Technology of Information Security

Secure computation service protocols for matrix singular value and norm ..... Liu Xin, Li Shundong, Chen Zhenhua, *et al.* (3413)  
Research on improvement of information-centric networking architecture for NetInf security ..... Liu Jiefang, Zhao Bin, Zhou Ning (3416)  
Research of network security risk prediction model based on cloud computing ..... Guo Zuhua, Li Yangbo, Xu Lixin, *et al.* (3421)  
Security analysis and improvement of certificateless signcryption scheme ..... Qin Yanlin, Wu Xiaoping (3426)  
Efficient tripartite quantum secret direct sharing scheme ..... Zhang Xiaoqian, Tan Xiaoqing, Liang Cui (3430)  
Image encryption algorithm based on complete Latin square ..... Yang Liuyang, Lyu Xiang (3435)  
Malware detection method based on covering sensitive points ..... Qin Yanfeng, Wang Qingxian, Zeng Yongjun, *et al.* (3439)  
New method to improve identification rate of encrypted bit stream in data link layer ..... Xing Meng, Wang Tao, Wu Yang, *et al.* (3443)  
Faster FHE scheme over integers ..... Dai Hongyan, Ding Yong, Lyu Haifeng, *et al.* (3448)  
Detection of jamming transmission of beacon in vehicular networks ..... Chen Dan, Peng Limin (3452)  
Evaluating quickly method for DDoS attack on authority DNS service ..... Pan Lanlan, Yuchi Xuebiao, Hu Anlei (3456)

### Technology of Graphic & Image

Optimization solution of 2 dimension geometry constraints based on problem decomposition ..... Gao Xueyao, Zhang Chunxiang, Lu Zhimao (3460)  
Online weighted multiple instance object tracking via active feature selection ..... Sun Baiwei, Chen Xiuhong, Qian Kai (3463)  
Threshold segmentation of uneven illumination images ..... Wang Zhong, Zheng Ronghao, Fu Luhua, *et al.* (3467)  
Region-based Markov random field renal cortex 3D segmentation method ..... Shi Yonggang, Chen Qing, Zhu Feng, *et al.* (3471)  
Mean-Shift tracking algorithm based on boundary detection and sandbags kernel function ..... Cao Yiqin, Xiao Jinsheng, Huang Xiaosheng (3475)  
Logo recognition based on weighted sorting retrieval and visual pattern mining ..... Liu Shi, Song Yan (3480)  
Polarimetric SAR image classification by introducing polarization orientation angle feature ..... Wang Jianbo, Wang Chao, Zhang Hong, *et al.* (3484)  
Robust accurate camera calibration method ..... Wen Tao, Zuo Dongguang, Li Zhongke, *et al.* (3489)  
Disparity map refinement based on image region segmentation and region mapping ..... Zhang Jinglei, Ji Ling (3492)  
New electronic image stabilization method solving large shift jitter of vehicle image ..... Zhang Yifei, Ma Na (3496)  
Precise eye location in low resolution image ..... Xu Guoqing (3501)  
Facial expression recognition based on differential texture features ..... Xia Haiying, Xu Luhui (3504)  
Research on visual tracking algorithm based on global and local appearance ..... Huang Huiqun (3508)  
Multi-resolution terrain height-field data compression for rapid GPU decoding ..... Zhang Bingqiang, Jiang Benqing, Fang Jun (3513)  
Face recognition of collaborative representation based on virtual samples ..... Zhang Zhelai, Ma Xiaohu (3518)