

- ❖ 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
- ❖ 2015 年中国国际影响力优秀学术期刊(自然科学与工程)
- ❖ 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

- ❖ 《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)) 核心期刊
- ❖ 波兰《哥白尼索引》(IC) 来源期刊
- ❖ 中国科学引文数据库(CSCD) 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
- ❖ 《中国工程技术电子信息网》来源期刊

## 计算机应用研究

Jisuanji Yingyong Yanjiu

第 34 卷 第 12 期 2017 年 12 月

### 目次

#### 综述评论

RFID 标签位置感知技术综述 .....	邱兰馨, 黄樟钦, 梁笑轩(3521)
控制领域的故障系统状态估计研究综述 .....	鲍汶东, 李建宁, 吕梅蕾, 文成林(3527)

#### 算法研究探讨

基于种子节点选择的重叠社区发现算法 .....	齐金山, 梁 循, 王 怡(3534)
基于语义语法分析的中文语句困惑度评价 .....	何天文, 王 红(3538)
融合句子情感和主题相似性的中文新闻文本情感摘要 .....	王 玮, 欧阳纯萍, 阳小华, 罗凌云, 刘志明(3543)
微博话题符号网络下的意见领袖挖掘算法研究 .....	曹林林, 郑明春(3547)
层次 K-均值聚类结合改进 ITML 的迁移度量学习方法 .....	蒋林利, 吴建生(3552)
基于用户属性与覆盖范围的意见领袖挖掘研究 .....	李亚星, 王兆凯, 刘利军, 冯旭鹏, 黄青松(3556)
利用博客链接平台选取联合关键字的博客聚类方法 .....	王 琦, 霍伟纲(3560)
面向主动学习的模糊核聚类采样算法 .....	王勇臻, 陈 燕, 张金松(3564)
CNN 与决策树结合的新型人体行为识别方法研究 .....	王忠民, 张 琮, 衡 霞(3569)
基于扩展 Infomax 与 DOST 的多导联睡眠脑电伪迹去除方法研究 .....	金 纯, 岳宗田, 马金辉(3573)
基于自适应步长的萤火虫划分聚类算法 .....	潘晓英, 陈雪静, 李昂儒, 赵 普(3576)
基于距离收敛量和历史信息密度的多目标进化算法 .....	李潇涵, 刘 博, 张 友(3580)
基于 Spark 的混合推荐算法研究 .....	胡德敏, 龚 燕(3585)
基于共轭梯度法改进的人工鱼群算法 .....	李 君, 梁昔明(3589)
基于变异策略的改进型花朵授粉算法 .....	王玉鑫, 李东生, 高 杨(3594)
一种基于引导策略的自适应粒子群优化算法 .....	姜凤利, 张 宇, 王永刚(3599)
基于灰狼算法的改进研究 .....	郭振洲, 刘 然, 拱长青, 赵 亮(3603)
改进的猫群算法求解 TSP .....	杨 进, 郑 允, 马 良(3607)
两种改进的模拟退火算法求解大值域约束满足问题 .....	原志强, 赵春艳(3611)
面向能耗机制的多目标柔性作业车间调度 .....	包哲人, 徐 华(3617)
求解多目标作业车间调度问题的混合变异杂草优化算法 .....	黄 霞, 叶春明, 曹 磊(3623)
基于多层网络的供应链金融建模与分析 .....	沈爱忠, 郭进利, 索 琪, 王福红(3628)
求解带硬时间窗的多目标车辆路径问题的多种混合蝙蝠算法 .....	殷 亚, 张惠珍(3632)
城市轨道交通车辆阻力公式经验参数文化基因优化算法的研究 .....	王龙达, 王兴成, 郝 华, 刘 罡(3637)
基于时空网络的无人车运行计划制定 .....	陈经纬, 何胜学, 程 龙(3642)
增广立方体网络的 $t/k$ 诊断度研究 .....	陈昭蓉, 陈秒江, 梁家荣(3647)
故障概率与影响因素因果关系的推理方法研究 .....	陈 烜, 沈玉志, 崔铁军(3651)
基于云模型和 SFT 的可靠性数据不确定性评价 .....	李莎莎, 崔铁军, 马云东(3656)
智能结构损伤自诊断的 PSO-LSWSVM 方法 .....	谢建宏(3660)
多翼统一混沌系统的自适应同步及反同步 .....	孙睿婷, 曾以成, 王 伟, 李 鑫(3663)
基于非退化平衡点的分数阶混沌经济系统演化规律研究 .....	胡行华, 高雷阜(3668)
基于小波变换和压缩感知的语音信号压缩研究 .....	高 悦, 臧明相, 郭颖英(3672)
基于优先集成算子的直觉乘法偏好关系共识模型 .....	王 睿, 李延来(3675)
基于类间判别的矩阵学习机 .....	张国威, 王 喆(3681)
基于条件型游走二部图协同过滤算法 .....	王明佳, 韩景侗(3685)

基于散列函数与半边数据结构的 TIN 拓扑重构算法 .....	赵景昌,高 菲,刘光伟,白润才,王 东(3689)
基于分布式偏好关系的多属性决策方法及应用 .....	常文军,孙超平,胡 鑫(3693)
基于粒子群优化算法的多核处理器任务调度研究 .....	田 佳,胡 威,李 琳,柯 鹏,张 凯(3698)
基于优先级的哈希结构复杂事件检测方法 .....	张旭燮,程良伦(3701)
基于耦合关系的加权 Slope One 算法 .....	沈学利,张 莹(3704)
基于国际贸易网特性的贸易依赖派系过滤算法 .....	郑 军,张永庆,黄 霞,沈爱忠(3708)
基于最近最远邻和互信息的特征选择方法 .....	吴 雨,刘媛华(3713)

#### 系统应用开发

云加端的嵌套滑动窗口故障信号在线检测方法研究 .....	耿晓强,唐向红,陆见光,刘国凯(3717)
改进多分类决策策略的 RVM 及其在液压泵故障诊断中的应用 .....	吕 岩,房立清,赵玉龙,齐子元(3721)
基于隐式评分和相似度传递的学习资源推荐 .....	付 芬,豆育升,韩 鹏,李耀辉(3725)
基于低复杂度最大空闲矩形的非线性传感器故障诊断方法 .....	刘运城,孙兴春,陈 安(3730)

#### 信息安全技术

BGP-SIS:一种域间路由系统 BGP-LDoS 攻击威胁传播模型 .....	苗 甫,王振兴,郭 毅,张连成,王 禹(3735)
基于敏感项集动态隐藏的用户隐私保护方法 .....	张海涛,朱云虹,霍晓宇(3740)
基于 SMOTE 和 GBDT 的网络入侵检测方法研究 .....	封化民,李明伟,侯晓莲,徐治理(3745)
基于连接数据分析和 OSELM 分类器的网络入侵检测系统 .....	安尼瓦尔·加马力,亚森·艾则孜,木尼拉·塔里甫(3749)
移动云存储中基于属性的搜索加密方案研究 .....	苏 航,朱智强,孙 磊(3753)
一种抗地址淹没的缓冲区栈溢出算法 .....	唐成华,彭 灿,刘 猛,钱俊彦(3758)
基于图模式与内存足迹的 Android 恶意应用与行为检测 .....	郑忠伟,欧毓毅(3762)

#### 网络与通信技术

协作认知无线网络中基于功率分配的安全波束成形 .....	董 健,石振弘,唐 锐,施荣华(3767)
5G 全双工 D2D 通信系统中的最优功率控制方案 .....	朱国晖,刘 涛,杨晶晶(3771)
基于最优跳距和改进粒子群的 DV-Hop 定位算法 .....	李新春,郭欣欣(3775)
基于 HMM 的私有协议自主学习方法 .....	付光远,刘津霖,李海龙(3779)
基于蚁群算法的短波侦收资源调度方法研究 .....	刘 洋,王伦文(3784)
基于业务 QoS 保证的中继系统资源分配算法 .....	张继荣,李永宝(3788)
面向云数据中心的虚拟机部署时延优化算法研究 .....	敬 超,程小辉(3792)
基于随机 Dropout 深度信念网络的移动用户行为识别方法 .....	王忠民,王 希,宋 辉(3797)
基于加权改进节点收缩法的供应链网络节点重要度评估 .....	张 旭,袁旭梅,袁继革(3801)
云环境下利用用户到数据中心建模的高效节能路由算法 .....	张 敏,谢辅雯,胡中栋(3806)

#### 图形图像技术

海量视频人脸提取与识别并行框架设计及优化 .....	李海跃,谭郁松,伍复慧(3811)
基于深度卷积神经网络的图像检索算法研究 .....	刘海龙,李宝安,吕学强,黄 跃(3816)
基于核字典学习的图像分类 .....	徐 俊,李元祥,Wei Xian,骆建华(3820)
基于选择性集成分类器的面部表情识别研究 .....	贾澎涛,李 阳(3825)
基于双模型融合的自适应目标跟踪算法 .....	王艳川,黄 海,李邵梅,王亚文(3828)
基于时空模型的尺度自适应视觉跟踪 .....	刘万军,董帅含,张杰民(3834)
一种融合 AutoEncoder 与 CNN 的混合算法用于图像特征提取 .....	刘兴旺,王江晴,徐 科(3839)
改进的应用于交通场景的运动目标检测方法及其质量评价 .....	郭晓光,闵卫东,韩 清(3843)
Harris 角点检测的 FPGA 快速实现方法 .....	闫小盼,敖 磊,杨 新(3848)
结合彩色图像局部分割的 Kinect 深度图修复算法 .....	吴 倩,史晋芳,王德娇,刘桂华(3852)
局部形状可调插值曲线曲面及其参数选取方案 .....	严兰兰,韩旭里,张席敬(3855)
基于奖励机制和互斥条件的图像对象协同定位 .....	李劲松,甘朝晖,蒋 旻(3861)
基于改进光线投影算法的医学图像三维重建 .....	李泽宇,陈一民,赵 艳,朱立峰,林靖生,吕圣卿(3866)
基于灰度分布匹配的多模态脑部 MR 图像肿瘤分割算法 .....	侯发忠,邹北骥,刘召斌,周支元(3869)
结合新颜色空间与 Otsu 的分水岭彩色图像分割算法 .....	汪 澜,张 慧,张海涛(3873)
改进蜂群算法的图像阈值分割方法 .....	张海涛,程新文,熊红伟,马海荣,陈联君,钱小刚(3880)
文物点云模型的优化配准算法 .....	赵夫群,周成全(3885)
结合全局和局部信息的水平集图像分割方法 .....	刘 晨,池 涛,李丙春,张宗虎(3889)
基于自适应分数阶微分的医学图像增强算法 .....	陈向阳,谭礼健(3895)
人体动作识别中基于 HTM 架构的时空特征提取方法 .....	王向前,孙 挺(3899)
基于自相关和 Hough 变换的丢失同步信息的视频图像还原 .....	胡玉峰,黄春琳,陆 珉(3904)

#### 信息集萃

《计算机应用研究》第 34 卷(2017)总目录 .....	
下期要目 .....	(3824)
期刊基本参数:CN51-1196/TP * 1984 * m * A4 * 320 * zh * P * ¥35.00 * 3840 * 86 * 2017-12 * n	

# Application Research of Computers

Vol. 34 No. 12 Dec. 2017

## Contents

### Survey

- Survey of indoor location-aware technology for RFID tag ..... Qiu Lanxin, Huang Zhangqin, Liang Xiaoxuan (3521)  
Review of state estimation of fault system in control domain ..... Bao Wendong, Li Jianning, Lyu Meilei, *et al.* (3527)

### Algorithm Research & Explore

- Overlapping community detection algorithm based on selection of seed nodes ..... Qi Jinshan, Liang Xun, Wang Yi (3534)  
Evaluating perplexity of Chinese sentences based on grammar & semantics analysis ..... He Tianwen, Wang Hong (3538)  
Chinese news text opinion summarization based on integrating sentences opinion and topic similarity .....  
..... Wang Wei, Ouyang Chunping, Yang Xiaohua, *et al.* (3543)  
Algorithm of opinion leader mining based on signed network ..... Cao Linlin, Zheng Mingchun (3547)  
Transfer metric learning method based on hierarchical K-means clustering and improved ITML ..... Jiang Linli, Wu Jiansheng (3552)  
Micro-blog opinion leader mining method based on user attributes and coverage ..... Li Yaxing, Wang Zhaokai, Liu Lijun, *et al.* (3556)  
Blog clustering method based on selection of joint keywords using blog connect platform ..... Wang Qi, Huo Weigang (3560)  
Sampling algorithm using kernel-based fuzzy clustering for active learning ..... Wang Yongzhen, Chen Yan, Zhang Jinsong (3564)  
Research on new human behavior recognition method based on CNN and decision tree ..... Wang Zhongmin, Zhang Cong, Heng Xia (3569)  
Research of artifact suppression of multi-channel sleep EEG based on extended Infomax and DOST ..... Jin Chun, Yue Zongtian, Ma Jinhui (3573)  
Firefly partition clustering algorithm based on self-adaptive step ..... Pan Xiaoying, Chen Xuejing, Li Angru, *et al.* (3576)  
Distance convergence and history density based multi-objective evolutionary algorithm ..... Li Xiaohan, Liu Bo, Zhang You (3580)  
Research on hybrid recommendation algorithm based on Spark technology ..... Hu Demin, Gong Yan (3585)  
Hybrid AFSA with conjugate gradient methods ..... Li Jun, Liang Ximing (3589)  
Improved flower pollination algorithm based on mutation strategy ..... Wang Yuxin, Li Dongsheng, Gao Yang (3594)  
Adaptive particle swarm optimization algorithm based on guiding strategy ..... Jiang Fengli, Zhang Yu, Wang Yonggang (3599)  
Study on improvement of gray wolf algorithm ..... Guo Zhenzhou, Liu Ran, Gong Changqing, *et al.* (3603)  
Improved cat swarm optimization for solving traveling salesman problem ..... Yang Jin, Zheng Yun, Ma Liang (3607)  
Two improved simulated annealing algorithms for solving constraint satisfaction problems with large domains ..... Yuan Zhiqiang, Zhao Chunyan (3611)  
Multi-objective flexible Job-Shop scheduling based on energy-consumption mechanism ..... Bao Zheren, Xu Hua (3617)  
Composite mutation invasive weed optimization algorithm for multi-objective Job-Shop scheduling problem ..... Huang Xia, Ye Chunming, Cao Lei (3623)  
Modeling and analysis of supply chain finance based on multiplex networks ..... Shen Aizhong, Guo Jinli, Suo Qi, *et al.* (3628)  
Multi-hybrid bat algorithm for solving multi-objectives vehicle routing problem with hard time-window ..... Yin Ya, Zhang Huizhen (3632)  
Research on memetic optimization algorithm of empirical parameter for resistance formula of urban rail vehicles .....  
..... Wang Longda, Wang Xingcheng, Hao Hua, *et al.* (3637)  
Operational plan of automated-vehicle based on time-space network ..... Chen Jingwei, He Shengxue, Cheng Long (3642)  
Research on  $t/k$ -diagnosability of augmented cubes network ..... Chen Zhaorong, Chen Miaojiang, Liang Jiarong (3647)  
Research on causality reasoning method of failure probability and influencing factors ..... Chen Xuan, Shen Yuzhi, Cui Tiejun (3651)  
Uncertainty evaluation of reliability based on cloud model and SFT ..... Li Shasha, Cui Tiejun, Ma Yundong (3656)  
PSO-LSWSVM used to self-diagnose damages for smart structures ..... Xie Jianhong (3660)  
Adaptive synchronization and anti-synchronization for new type of multi-wing unified chaotic system .....  
..... Sun Ruiting, Zeng Yicheng, Wang Wei, *et al.* (3663)  
Research on evolution law of non-degenerate equilibrium point of fractional order chaotic economic system ..... Hu Xinghua, Gao Leifu (3668)  
Research on speech compression based on wavelet transform and compressed sensing ..... Gao Yue, Zang Mingxiang, Guo Fuying (3672)  
Consensus model with intuitionistic multiplicative preference relations based on prioritized aggregation operators ..... Wang Rui, Li Yanlai (3675)  
Matrixized learning machine with between-class discrimination ..... Zhang Guowei, Wang Zhe (3681)  
Collaborative filtering algorithm based on conditional walk bipartite graph ..... Wang Mingjia, Han Jingti (3685)  
TIN topological reconstruction algorithm based on hash function and half-edge data structure ..... Zhao Jingchang, Gao Fei, Liu Guangwei, *et al.* (3689)  
Multiple attribute decision making method based on distributed preference relations and its application ..... Chang Wenjun, Sun Chaoping, Hu Xin (3693)  
Research on multi-core processor task scheduling based on particle swarm optimization algorithm ..... Tian Jia, Hu Wei, Li Lin, *et al.* (3698)  
Complex event detection method based on priority hash structure ..... Zhang Xuman, Cheng Lianglun (3701)  
Weighted Slope One algorithm based on coupling relationship ..... Shen Xueli, Zhang Ying (3704)

Trade dependence weighted clique percolation algorithm based on characteristics of international trade networks .....	Zheng Jun, Zhang Yongqing, Huang Xia, <i>et al.</i> (3708)
Feature selection method based on the nearest & farthest neighbors and mutual information .....	Wu Yu, Liu Yuanhua (3713)

### System Development & Application

Fault data detection method based on nesting sliding window of cloud and terminal .....	Geng Xiaoqiang, Tang Xianghong, Lu Jianguang, <i>et al.</i> (3717)
Improved multiple classification decision strategy of RVM and its application to fault diagnosis of hydraulic pump .....	Lyu Yan, Fang Liqing, Zhao Yulong, <i>et al.</i> (3721)
Learning resource recommendation based on implicit scoring and similarity propagation .....	Fu Fen, Dou Yusheng, Han Peng, <i>et al.</i> (3725)
Method of nonlinear sensor fault diagnosis based on low computational largest empty rectangle .....	Liu Yuncheng, Sun Xingchun, Chen An (3730)

### Technology of Information Security

BGP-SIS : a BGP-LDoS attack threat propagation model for inter domain routing system .....	Miao Fu, Wang Zhenxing, Guo Yi, <i>et al.</i> (3735)
User privacy protection method based on dynamic hiding of sensitive items .....	Zhang Haitao, Zhu Yunhong, Huo Xiaoyu (3740)
Study of network intrusion detection method based on SMOTE and GBDT .....	Feng Huamin, Li Mingwei, Hou Xiaolian, <i>et al.</i> (3745)
Network intrusion detection system based on connection data analysis and OSELM classifier .....	Anwar Jamal, Yasen Aizezi, Munila Talifu (3749)
Research on searchable attribute based encryption in mobile cloud storage .....	Su Hang, Zhu Zhiqiang, Sun Lei (3753)
Anti-address flooding algorithm for buffer stack overflow .....	Tang Chenghua, Peng Can, Liu Meng, <i>et al.</i> (3758)
Graph pattern and memory footprint based malware application and behavior detection of Android .....	Zheng Zhongwei, Ou Yuyi (3762)

### Technology of Network & Communication

Secure beamforming based on power allocation in cooperative cognitive radio networks .....	Dong Jian, Shi Zhenhong, Tang Kun, <i>et al.</i> (3767)
Optimal power control for 5G full-duplex enabled D2D communication .....	Zhu Guohui, Liu Tao, Yang Jingjing (3771)
DV-Hop localization algorithm based on best average hop distances and improved particle swarm .....	Li Xinchun, Guo Xinxin (3775)
Automated private protocol learning method based on HMM .....	Fu Guangyuan, Liu Jinlin, Li Hailong (3779)
Method of resource scheduling for HF cooperative reception based on ant colony optimization algorithm .....	Liu Yang, Wang Lunwen (3784)
Resource allocation algorithm for relay systems based on QoS guarantees .....	Zhang Jirong, Li Yongbao (3788)
Research of virtual machine placement algorithm for latency optimization on cloud data center .....	Jing Chao, Cheng Xiaohui (3792)
Human activity recognition method based on random Dropout deep belief network .....	Wang Zhongmin, Wang Xi, Song Hui (3797)
Node importance evaluation for supply chain network based on weighted improved node contraction method .....	Zhang Xu, Yuan Xumei, Yuan Jige (3801)
Energy efficient routing algorithm by modeling in data center under cloud environment .....	Zhang Min, Xie Fuwen, Hu Zhongdong (3806)

### Technology of Graphic & Image

Parallel framework for extraction and recognition for large-scale video .....	Li Haiyue, Tan Yusong, Wu Fuhui (3811)
Image retrieval based on deep convolutional neural network .....	Liu Hailong, Li Baoan, Lyu Xueqiang, <i>et al.</i> (3816)
Image classification based on kernel dictionary learning .....	Xu Jun, Li Yuanxiang, Wei Xian, <i>et al.</i> (3820)
Facial expression recognition research based on selective ensemble classifiers .....	Jia Pengtao, Li Yang (3825)
Adaptive target tracking algorithm based on fusion of two models .....	Wang Yanchuan, Huang Hai, Li Shaomei, <i>et al.</i> (3828)
Scale adaptive visual tracking based on spatio-temporal model .....	Liu Wanjun, Dong Shuaihan, Zhang Jiemin (3834)
Novel image feature extraction algorithm based on fusion AutoEncoder and CNN .....	Liu Xingwang, Wang Jiangqing, Xu Ke (3839)
Improved moving object detection algorithm in traffic video processing and quality evaluation .....	Guo Xiaoguang, Min Weidong, Han Qing (3843)
Real-time Harris corner detection method based on FPGA .....	Yan Xiaopan, Ao Lei, Yang Xin (3848)
Local segmentation of color image for Kinect depth recovery .....	Wu Qian, Shi Jinfang, Wang Dejiao, <i>et al.</i> (3852)
Parameter selection scheme of local shape adjustable interpolation curve and surface .....	Yan Lanlan, Han Xuli, Zhang Xijing (3855)
Reward strategy based image object co-localization with mutex constraint .....	Li Jinsong, Gan Zhaohui, Jiang Min (3861)
Three dimensional reconstruction of medical images based on improved ray projection algorithm .....	Li Zeyu, Chen Yimin, Zhao Yan, <i>et al.</i> (3866)
Tumor segmentation on multi-modality brain MR image based on grayscale distribution matching .....	Hou Fazhong, Zou Beiji, Liu Zhaobin, <i>et al.</i> (3869)
Watershed image segmentation algorithm combining with Otsu in new color space .....	Wang Lan, Zhang Hui, Zhang Haitao (3873)
Image threshold segmentation method based on improved artificial bee colony .....	Zhang Haitao, Cheng Xinwen, Xiong Hongwei, <i>et al.</i> (3880)
Optimal registration algorithm for point cloud model of cultural relics .....	Zhao Fuqun, Zhou Mingquan (3885)
Level set image segmentation method by global and local information .....	Liu Chen, Chi Tao, Li Bingchun, <i>et al.</i> (3889)
Medical image enhancement algorithm based on adaptive fractional order differentiation .....	Chen Xiangyang, Tan Lijian (3895)
Spatial-temporal feature extraction method based on HTM structure for human action recognition .....	Wang Xiangqian, Sun Ting (3899)
Video image reconstruction without synchronous information based on autocorrelation and Hough transform .....	Hu Yufeng, Huang Chunlin, Lu Min (3904)