

- ❖ 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、2017 年中国国际影响力优秀学术期刊(自然科学与工程技术)
- ❖ 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
- ❖ 中国精品科技期刊顶尖学术论文(F5000)项目来源期刊
- ❖ 《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 35 卷 第 12 期 2018 年 12 月

### 目 次

#### 综述评论

深度学习在遥感影像分类中的研究进展 .....	付伟锋, 邹维宝(3521)
基于 MEMS 加速度传感器的步数检测算法研究综述 .....	谢光强, 黄向龙, 李 杨, 徐 峰(3526)

#### 算法研究探讨

在线增量极限学习机及其性能研究 .....	马致远, 罗光春, 秦 科, 汪 楠(3533)
基于类别方差的特征权重算法 .....	周鹏程, 刘旭敏, 徐维祥(3538)
面向复杂中文地址关联的三维关系评估模型 .....	王宇璐, 张 伟, 贺泽宇(3541)
基于情感词向量和 BLSTM 的评论文本情感倾向分析 .....	邓 楠, 余本功(3547)
基于 fcmpCNN 模型的网络文本情感多分类标注 .....	周锦峰, 叶施仁, 王 晖(3551)
基于词向量技术和混合神经网络的情感分析 .....	胡朝举, 赵晓伟(3556)
结合信任和用户关系的微博关注推荐算法 .....	王梦佳, 贺智明, 郑 剑(3560)
基于真实核心点的密度聚类方法 .....	张 涛, 刘 昶, 周晓峰, 李 帅(3564)
具有词判别力学习能力的短文本聚类概率模型研究 .....	牛亚男(3569)
应用于数字电视用户浏览行为的二分 K-medoids 聚类算法 .....	费红英, 孙 丹(3575)
基于双阈值 Apriori 算法和非频繁项集的关联规则挖掘方法 .....	阮梦黎, 吴 磊(3579)
基于凝聚子群的口碑传播机制研究 .....	刘 星, 钱晓东(3584)
一种集成局部加权聚类系数的链接预测算法 .....	伍杰华, 张小兰, 沈 静, 周 蓓(3588)
自适应调整的布谷鸟搜索 K-均值聚类算法 .....	王日宏, 崔兴梅, 李永珺(3593)
一种基于核心顶点的无参图聚类算法 .....	林俊山, 温晓芳, 陈 梅(3598)
一种知识驱动的个性化文献推荐方法 .....	邹弘智, 闫健卓, 陈建辉(3603)
基于因果效应的贝叶斯网络结构学习方法 .....	安 宁, 滕 越, 杨矫云, 李 廉(3609)
隐式反馈场景中结合信任与相似度的排序推荐 .....	廖列法, 朱亚兰, 勒孚刚(3614)
基于置信度加权的单类协同过滤推荐算法 .....	郭 伟, 王佳伟, 唐晓亮, 洪 倩(3618)
结合非负矩阵分解的主题社区好友推荐算法 .....	杨丰瑞, 郑云俊, 张 昌(3624)
基于节点重要度的用户推荐 .....	白 杨, 邓贵仕, 姜春霞(3628)
基于用户偏好和可疑度的推荐方法研究 .....	吴彦文, 刘 闯(3632)
融合元数据及隐式反馈信息的多层次联合学习推荐方法 .....	张全贵, 李志强, 蔡 丰, 王 星(3635)
基于情景上下文与信任关系的旅游景点推荐算法 .....	沈记全, 王 磊, 侯占伟, 薛 霄(3640)
利用集成分类器处理链路预测中的分类不平衡问题 .....	贾承丰, 韩 华, 吕亚楠, 王海军(3644)
基于 Spark 无线城市社团发现算法的研究 .....	王永贵, 徐山珊, 肖成龙(3648)
基于 LSTM 网络的中文地址分词法的设计与实现 .....	张文豪, 卢 山, 程 光(3652)
结合旋转森林和 AdaBoost 分类器的多标签文本分类方法 .....	韩 栋, 王春华, 肖 敏(3655)

基于改进 PageRank 的多属性水网节点综合评价 .....	张鑫,陈燕,李桃迎(3659)
基于 PSO_SVM_AdaBoost 的煤层底板突水预测研究 .....	温廷新,于凤娥(3664)
基于改进深度信念网络的心血管疾病预测研究 .....	逯鹏,王玉辰,李奇航,刘艳红,郭赛迪(3668)
基于神经形态电路的音频场景特征提取及识别技术 .....	王雨辰,胡华(3673)
一种基于反思机制的教与学优化算法 .....	童楠,符强,钟才明(3678)
基于 Pignistic 相似度与改进 DS 证据理论的综合评估方法 .....	李波(3682)
一种增量式约简方法求解最小顶点覆盖问题 .....	占善华,谢小军(3685)
一种用于 CBR 推理机的案例学习算法研究 .....	李潇,闵华松,林云汉(3689)
一个简化的正弦余弦算法:正弦算法 .....	曲良东,何登旭(3694)
基于最大熵神经网络算法的柔性制造系统调度策略研究 .....	解明利,胡占齐,马宁(3697)
轴辐式网络下多重时效要求的车辆调度问题 .....	吕婷,王爱虎(3701)
一种考虑截止期的 METCD 业务组合调度方法 .....	黄冬梅,张腾飞,梅海彬,宋巍,苏诚(3706)
求解 IPPS 顺序柔性调度问题的模型与集成调度算法研究 .....	黄学文,孙榕,李冠雄(3710)
具有行为效应的 TFT-LCD 模块组装多目标调度研究 .....	吴思思,叶春明,李瑞婷(3716)
柔性作业车间人员配置及作业排序问题研究 .....	张维存,赵晓巧(3722)
基于技术升级与选择决策的供应链物流网络再设计 .....	秦小辉(3729)
无车承运人业态下的物流服务商选择研究 .....	江玉杰,韩晓龙(3733)

#### 系统应用开发

基于路径索引的密集邻域图数据查询方法研究 .....	段慧芳,汤小春(3738)
基于双环结构的视觉伺服云台控制器设计 .....	肖杨,李俊辉,闻成(3743)
基于 RBF 神经网络控制的球杆系统位置控制实验研究 .....	朱坚民,沈昕璐,黄之文(3747)
机床主轴热误差建模算法 .....	崔怡,李郝林,陈龙(3752)

#### 网络与通信技术

基于多处碰撞位探测的标签防碰撞算法研究 .....	傅豪磊,陆王延(3757)
基于改进经验模态分解的 HHT 密集模态识别方法 .....	荣钦彪,刘昉,宿策(3761)
基于全双谱和卷积神经网络的信号分类方法 .....	方成,薛质(3766)
稀疏阵列的波束形成与控制方法 .....	黄秀琼,万群,丛迅超,樊荣(3770)
一种异构云环境下的负载均衡算法 .....	刘亚秋,孙新越,景维鹏(3773)
基于 LP&GR 算法的多优先级虚拟机迁移策略研究 .....	张智俊,李敬兆(3777)
软件定义承载网中基于负载均衡的虚拟网络重配置方法 .....	赵季红,苏珂娜,曲桦,樊斌,杨晶晶(3781)
VANET 中基于 WSN 节点感知的高效路由协议设计方案 .....	张定祥,张跃进(3786)
基于在线异常感知的无线网络抗 SSDF 攻击协作频谱感知框架 .....	杨震,齐兴斌(3791)

#### 图形图像技术

基于分离字典构造的快速压缩感知重构算法 .....	张长伦,余沾,王恒友,何强(3795)
基于超像素统计量的随机森林遥感图像分类 .....	石彩霞,赵传钢,庞蕾(3798)
多通道多模式融合 LBP 特征的纹理相似度计算 .....	刘涛,周先春,严锡君(3803)
基于多子块联合估计的相关滤波跟踪 .....	曹洁,解博江,李伟,王进花(3807)
基于 Leader-Follower 的分队队形控制寻径算法研究 .....	陈逸,高岩,王长波(3812)
基于雅克比稀疏自动编码机的手写数字识别算法 .....	王慧玲,宋威(3816)
基于稀疏自编码特征聚类算法的图像篡改检测 .....	王梦思,霍宏涛,罗霄阳(3820)
改进协同表示的高光谱图像异常检测算法 .....	刘万军,武小杰,曲海成,王凤(3824)
基于多流 CNN-LSTM 网络的群体情绪识别 .....	卿粼波,熊文诗,周文俊,熊珊珊,吴晓红(3828)
结构纹理分离的对比度和细节增强 .....	尹超,郭晓金,田肖,何川(3832)
基于暗原色先验的快速单幅图像去雾算法 .....	王殿伟,闫伟超,刘颖,朱婷鸽(3836)

#### 信息集萃

《计算机应用研究》第 35 卷(2018)总目次	
下期要目 .....	(3811)

期刊基本参数:CN51-1196/TP \* 1984 \* m \* A4 \* 320 \* zh \* P \* ¥35.00 \* 3840 \* 71 \* 2018-12 \* n

本期责任编辑 何俐

# Application Research of Computers

Vol. 35 No. 12 Dec. 2018

## Contents

### Survey

- Review of remote sensing image classification based on deep learning ..... Fu Weifeng, Zou Weibao (3521)  
Review of research on step detection algorithm with MEMS-based acceleration sensor ..... Xie Guangqiang, Huang Xianglong, Li Yang, *et al.* (3526)

### Algorithm Research & Explore

- Research on online incremental extreme learning machine and its performance ..... Ma Zhiyuan, Luo Guangchun, Qin Ke, *et al.* (3533)  
Feature weighting algorithm based on class variance ..... Zhou Pengcheng, Liu Xumin, Xu Weixiang (3538)  
Three-dimensional relationship evaluation model for complex Chinese address associating ..... Wang Yulu, Zhang Wei, He Zeyu (3541)  
Sentiment orientation analysis of review text based on sentiment word embedding and BLSTM ..... Deng Nan, Yu Bengong (3547)  
Multi-category classification for network text sentiment based on fcmpCNN ..... Zhou Jinfeng, Ye Shiren, Wang Hui (3551)  
Sentiment analysis based on word vector technology and hybrid neural network ..... Hu Chaoju, Zhao Xiaowei (3556)  
Microblog followee recommendation algorithm combining with trust and user relationship ..... Wang Mengjia, He Zhiming, Zheng Jian (3560)  
Density clustering algorithm based on real core point ..... Zhang Tao, Liu Chang, Zhou Xiaofeng, *et al.* (3564)  
Research on short-text clustering probability model with word discrimination ability ..... Niu Yanan (3569)  
Bisecting K-medoids clustering application in user browsing behavior of connected TV ..... Fei Hongying, Sun Dan (3575)  
Association rule mining method based on double threshold Apriori algorithm and infrequent itemsets ..... Ruan Mengli, Wu Lei (3579)  
Research of word-of-mouth communication mechanism based on cohesive subgroup ..... Liu Xing, Qian Xiaodong (3584)  
Algorithm of integrating local weighted clustering coefficients for link prediction ..... Wu Jiehua, Zhang Xiaolan, Shen Jing, *et al.* (3588)  
Self-adaptive adjustment of cuckoo search K-means clustering algorithm ..... Wang Rihong, Cui Xingmei, Li Yongjun (3593)  
No-parameter graph clustering algorithm based on core vertex ..... Lin Junshan, Wen Xiaofang, Chen Mei (3598)  
Personalized literature recommendation method driven by knowledge ..... Kuai Hongzhi, Yan Jianzhuo, Chen Jianhui (3603)  
Bayesian network structure learning method based on causal effect ..... An Ning, Teng Yue, Yang Jiaoyun, *et al.* (3609)  
Ranking recommendation combining trust and similarity for implicit feedback ..... Liao Liefu, Zhu Yalan, Le Fugang (3614)  
One-class collaborative filtering based on confidence weighting ..... Guo Wei, Wang Jiawei, Tang Xiaoliang, *et al.* (3618)  
Topic community friend recommendation algorithm based on non-negative matrix factorization ..... Yang Fengrui, Zheng Yunjun, Zhang Chang (3624)  
User recommendation based on node importance degree ..... Bai Yang, Deng Guishi, Jiang Chunxia (3628)  
Research on recommendation method based on user preference and suspicious degree ..... Wu Yanwen, Liu Chuang (3632)  
Combing metadata and implicit feedback to recommendation by multi-level deep joint learning ..... Zhang Quanguai, Li Zhiqiang, Cai Feng, *et al.* (3635)  
Attractions recommendation algorithm based on situational context and trust relationship ..... Shen Jiquan, Wang Lei, Hou Zhanwei, *et al.* (3640)  
Handling class imbalance in link prediction using ensemble classifier ..... Jia Chengfeng, Han Hua, Lyu Yanan, *et al.* (3644)  
Research on community discovery algorithm of wireless city based on Spark ..... Wang Yonggui, Xu Shanshan, Xiao Chenglong (3648)  
Design and implementation of Chinese address segmentation method based on LSTM networks ..... Zhang Wenhao, Lu Shan, Cheng Guang (3652)  
Multi-label text classification method based on rotating forest and AdaBoost classifier ..... Han Dong, Wang Chunhua, Xiao Min (3655)  
Multi-attribute comprehensive evaluation in water network based on improved PageRank ..... Zhang Xin, Chen Yan, Li Taoying (3659)  
Research on prediction of water inrush from coal seam floor based on PSO\_SVM\_AdaBoost ..... Wen Tingxin, Yu Feng'e (3664)  
Research on cardiovascular disease prediction model based on improved depth trust network ..... Lu Peng, Wang Yuchen, Li Qihang, *et al.* (3668)  
Audio feature extraction and context recognition based on neuromorphic circuit ..... Wang Yuchen, Hu Hua (3673)

Improved TLBO algorithm based on reflection mechanism .....	Tong Nan, Fu Qiang, Zhong Caiming(3678)
Synthesis assessment method based on Pignistic similarity and improved DS evidence theory .....	Li Bo(3682)
Incremental attribute reduction method for minimum vertex cover problem .....	Zhan Shanhua, Xie Xiaojun(3685)
Case study algorithm of CBR reasoning machine .....	Li Xiao, Min Huasong, Lin Yunhan(3689)
Simplified sine cosine algorithm; sine algorithm .....	Qu Liangdong, He Dengxu(3694)
Research on scheduling strategy of flexible manufacturing system based on maximum entropy neural network algorithm .....	Xie Mingli, Hu Zhanqi, Ma Ning(3697)
Vehicle routing problem with many time windows based on hub-and-spoke network .....	Lyu Ting, Wang Aihu(3701)
METCD business combinational scheduling method considering deadline .....	Huang Dongmei, Zhang Tengfei, Mei Haibin, <i>et al.</i> (3706)
Research on model and integrated scheduling algorithm for IPPS problem with sequencing flexibility .....	Huang Xuewen, Sun Rong, Li Guanxiong(3710)
Research on TFT-LCD module assembly multi-objective scheduling problem with behavior effects .....	Wu Sisi, Ye Chunming, Li Ruiting(3716)
Research on operator allocation and scheduling problem for flexible job-shop .....	Zhang Weicun, Zhao Xiaojiao(3722)
Redesign for supply chain logistics network based on decision of technology transformation and selection .....	Qin Xiaohui(3729)
Research on selection of logistics service providers in condition of non-car operating carriers .....	Jiang Yujie, Han Xiaolong(3733)

### **System Development & Application**

Research on querying method for dense neighborhood of graph data based on path index .....	Duan Huifang, Tang Xiaochun(3738)
Visual servo platform controller design based on double-loop structure .....	Xiao Yang, Li Junhui, Wen Cheng(3743)
Experimental study of ball and beam system position control based on RBF neural network control .....	Zhu Jianmin, Shen Xinlu, Huang Zhiwen(3747)
Thermal error modeling algorithm of machine tool spindle .....	Cui Yi, Li Haolin, Chen Long(3752)

### **Technology of Network & Communication**

Research of tag anti-collision algorithm based on multiple collision bits detection .....	Fu Haolei, Lu Wangyan(3757)
HHT dense mode identification method based on improved empirical mode decomposition .....	Rong Qinbiao, Liu Fang, Su Ce(3761)
Signal classification method based on complete bispectrum and convolutional neural network .....	Fang Cheng, Xue Zhi(3766)
Beamforming and control method for sparse array .....	Huang Xiuqiong, Wan Qun, Cong Xunchao, <i>et al.</i> (3770)
Load balancing algorithm for scheduling in heterogeneous cloud .....	Liu Yaqiu, Sun Xinyue, Jing Weipeng(3773)
Research on multiple priority virtual machine migration strategy based on LP&GR algorithm .....	Zhang Zhijun, Li Jingzhao(3777)
Reconfiguration method based on load balance for virtual network in Carrier-SDN .....	Zhao Jihong, Su Keyuan, Qu Hua, <i>et al.</i> (3781)
Efficient routing protocol design using WSN node perception in VANET .....	Zhang Dingxiang, Zhang Yuejin(3786)
Cooperative spectrum sensing schema against SSDF attack using online abnormal perception in cognitive radio networks .....	Yang Zhen, Qi Xingbin(3791)

### **Technology of Graphic & Image**

Fast compressive sensing reconstruction algorithm based on separable dictionary construction .....	Zhang Changlun, Yu Zhan, Wang Hengyou, <i>et al.</i> (3795)
Research on random forest remote sensing image classification based on superpixel statistics .....	Shi Caixia, Zhao Chuangang, Pang Lei(3798)
Texture similarity calculation with LBP features fused by multi-channel and multi-mode .....	Liu Tao, Zhou Xianchun, Yan Xijun(3803)
Correlation filter object tracking based joint multi-blocks estimation .....	Cao Jie, Xie Bojiang, Li Wei, <i>et al.</i> (3807)
Research on team formation control path finding algorithm based on Leader-Follower .....	Chen Yi, Gao Yan, Wang Changbo(3812)
JSAE; Jacobian regularized sparse auto-encoders on MNIST database .....	Wang Huiling, Song Wei(3816)
Image forgery detection based on sparse autoencoder feature and clustering algorithm .....	Wang Mengsi, Huo Hongtao, Luo Xiaoyang(3820)
Improved collaborative representation for hyperspectral imagery anomaly detection algorithm .....	Liu Wanjun, Wu Xiaojie, Qu Haicheng, <i>et al.</i> (3824)
Crowd emotion recognition based on multi-stream CNN-LSTM networks .....	Qing Linbo, Xiong Wenshi, Zhou Wenjun, <i>et al.</i> (3828)
Contrast and detail enhancement based on structure and texture .....	Yin Chao, Guo Xiaojin, Tian Xiao, <i>et al.</i> (3832)
Fast single image dehazing algorithm based on dark channel prior .....	Wang Dianwei, Yan Weichao, Liu Ying, <i>et al.</i> (3836)