



中国计算机学会会刊  
中国科技核心期刊  
中国科技论文统计源期刊  
RCCSE 核心期刊

ISSN 1673-629X  
CN61-1450/TP

# 计算机技术与发展

COMPUTER TECHNOLOGY  
AND DEVELOPMENT

第28卷 第6期 VOL.28 NO.06

G

N

I

D

A

E

L

T

M

O

V

O

R

P

E

T

A

V

Q

N

N

N

N

引领 推动 创新



06  
2018

ISSN 1673-629X



0.6>

9 771673 629188

万方数据

## 目 次

### 智能、算法、系统工程

基于卷积神经网络的小样本车辆检测与识别	吴玉枝	吴志红	熊运余	(1)		
基于词向量的特征词选择	彭昀磊	牛耘		(7)		
面向云计算的分布式应用自动部署框架	李超	花磊	宋云奎	(12)		
卷积网络的无监督特征提取对人脸识别的研究			杜柏圣	(17)		
基于小波变换的图像压缩编码方法研究	詹为	段先华	於跃成	(21)		
基于内存云的数据存储优化策略	张猛	钱育蓉	蒲勇霖	范迎迎	杜娇	(26)
基于多特征的深度图像序列人体行为识别			宋相法	姚旭	(30)	
基于 Spark 的 CVFDT 分类算法并行化研究			庄荣	李玲娟	(35)	
用于 Canny 算子边缘检测的广度优先算法研究	肖瑞莹	杨帆	董正宏	(39)		
基于 OBB 包围盒碰撞检测算法的改进	刘超	蒋夏军	施慧彬	(43)		
基于进化算法和模糊控制的机器人路径规划	张俊溪	米国际	王鑫	蒋江红	(49)	
基于视频场景深度学习的人物语义识别模型	高翔	陈志	岳文静	龚凯	(53)	
基于深度学习和动态时间规整的人体运动检索	楚超勤	肖秦琨	高嵩	(59)		
个性化搜索用户兴趣更新学习及评价研究	宋毅		徐志明	(64)		
基于 Qt/Embedded 的图形硬加速方法研究与实现	王凯	宁钰	周威	(67)		
基于内容流行度和节点重要度的 CCN 缓存策略	郑凯月		潘沛生	(73)		
基于小波变换的自适应水岭边缘检测技术	温金玉	宣士斌	肖石林	(77)		
基于 Spark 的密度聚类算法并行化研究	朱子龙		李玲娟	(80)		
基于深度学习的车牌识别系统设计			陈利	(85)		
K 均值聚类算法的研究与优化	陶莹	杨锋	刘洋	戴兵	(90)	
基于模型融合和特征关联的视频目标跟踪算法	季露	陈志	岳文静	(93)		
MongoDB 分页技术优化研究			戴传飞	马明栋	(97)	

- 基于 OpenLayers 的流域基础信息数据库 ..... 叶凯 蒲智 林思成 (102)  
基于联合直方图的自适应粒子滤波跟踪算法 ..... 刘少林 朱文球 孙文静 王业祥 (106)

## 安全与防范

- 标准模型下基于身份的分等级加密方案 ..... 陈宇 祁正华 王翔 (110)  
Docker 安全性研究 ..... 鲁涛 陈杰 史军 (115)  
基于 SIFT 与 K-means 的图像复制粘贴篡改检测 ..... 叶雨晴 邱晓晖 (121)  
类不平衡稀疏重构度量学习软件缺陷预测 ..... 史作婷 吴迪 荆晓远 吴飞 (125)

## 应用开发研究

- 基于机器学习的多车牌识别算法应用研究 ..... 郑顾平 闫勃勃 李刚 (129)  
AOD 炉炉衬风口侵蚀识别方法的研究 ..... 邱东 郭红涛 刘明硕 (133)  
农业墒情预警信息实时推送系统的设计与实现 ..... 郑九锋 姚凯学 (137)  
基于车载自组网(VANET)的车辆协作系统 ..... 马广 柯锦超 陈娜佳 王震 周伟志 (142)  
基于正则抽取的竹种数据结构化方法研究 ..... 李欣 李绍稳 许高建 林建彬 (147)  
基于相位差的子区交通信号协调优化控制 ..... 胡海涛 罗杰 (151)  
基于神经网络的光栅信号软件细分技术的研究 ..... 汤攀 张厚武 何勇 (156)  
基于双目视觉的货车尺寸测量 ..... 王潜 张艳彬 (161)  
基于 WebGL 的三维落叶场景仿真 ..... 张文娟 吴琼 曹欣然 (165)  
统一着色架构 3D 引擎关键技术研究 ..... 邓艺 田泽 韩立敏 (170)  
移动 Ad Hoc 网络下协作缓存策略研究 ..... 蒋泉 潘沛生 (174)  
云环境下基于相关性的并行任务调度策略 ..... 段菊 于治国 (178)  
基于双目立体视觉的取走物检测技术研究 ..... 张爱升 张艳彬 (184)  
基于计算机协同工作的高层体系结构组播扩展 ..... 张德刚 王达达 李泽河 黄继杰 (188)  
基于 CEP 的校园推荐系统设计与实现 ..... 周苾 卢山 汤鲲 (192)  
基于 S3C6410 的老年人远程看护系统的设计 ..... 赵诗辞 何勇 毕赣斌 (197)  
基于模拟退火的加权 DV\_Hop 的 WSN 定位算法 ..... 张治华 张玲华 (201)

## 会议消息

- CNCC2018 技术论坛征集通知 ..... (封三)

## CONTENTS

Vehicle Detection and Recognition of a Few Samples Based on Convolutional Neural Network .....	WU Yu-zhi, WU Zhi-hong, XIONG Yun-yu ( 1 )
Feature Words Selection Based on Word Embedding .....	PENG Yun-lei, NIU Yun ( 7 )
Deployment Framework for Distributed Applications in Cloud Computing .....	LI Chao, HUA Lei, SONG Yun-kui (12)
Research on Unsupervised Feature Extraction Based on Convolutional Neural Network for Face Recognition .....	DU Bai-sheng (17)
Research on Image Compression Coding Method Based on Wavelet Transform .....	ZHAN Wei, DUAN Xian-hua, YU Yue-cheng (21)
Data Storage Optimization Strategy Based on Memory Cloud .....	ZHANG Meng, QIAN Yu-rong, PU Yong-lin, et al (26)
Human Activity Recognition from Depth Image Sequences Based on Multiple Features .....	SONG Xiang-fa, YAO Xu (30)
Research on Parallelization of Concept-adapting Very Fast Decision Tree Classification Algorithm Based on Spark .....	ZHUANG Rong, LI Ling-juan (35)
Research on Breadth First Search Algorithm for Edge Detection of Canny Operator .....	XIAO Rui-ying, YANG Fan, DONG Zheng-hong (39)
Improved Collision Detection Algorithm Based on Oriented Bounding Box .....	LIU Chao, JIANG Xia-jun, SHI Hui-bin (43)
Research on Path Planning of Robot Based on Evolutionary Algorithm and Fuzzy Control Algorithm .....	ZHANG Jun-xi, MI Guo-ji, WANG Xin, et al (49)
Human Semantic Recognition Model Based on Video Scene Deep Learning .....	GAO Xiang, CHEN Zhi, YUE Wen-jing, et al (53)
Human Motion Retrieval Based on Deep Learning and Dynamic Time Warping .....	CHU Chao-qin, XIAO Qin-kun, GAO Song (59)
Research on Personalized Search User Interest Updating Learning and Evaluation .....	SONG Yi, XU Zhi-ming (64)
Research and Implementation of Embedded GUI Display Architecture with Qt/Embedded .....	WANG Kai, NING Yu, ZHOU Wei (67)
A Caching Scheme Based on Content Popularity and Betweenness in Content Centric Network .....	ZHENG Kai-yue, PAN Pei-sheng (73)
An Adaptive Watershed Edge Detection Technology Based on Wavelet Transform .....	WEN Jin-yu, XUAN Shi-bin, XIAO Shi-lin (77)
Research on Parallelization of Density Clustering Algorithm Based on Spark .....	ZHU Zi-long, LI Ling-juan (80)
Design of License Plate Recognition System Based on Deep Learning .....	CHEN Li (85)
Research and Optimization of K-means Clustering Algorithm .....	TAO Ying, YANG Feng, LIU Yang, et al (90)

Video Target Tracking Algorithm Based on Model Fusion and Feature Association .....	JI Lu, CHEN Zhi, YUE Wen-jing (93)
Research on Optimization of MongoDB Paging Technology .....	DAI Chuan-fei, MA Ming-dong (97)
Basin Basic Information Database Based on OpenLayers .....	YE Kai, PU Zhi, LIN Si-cheng (102)
An Adaptive Particle Filtering and Tracking Algorithm Based on Joint Histogram .....	LIU Shao-lin, ZHU Wen-qiu, SUN Wen-jing, et al (106)
A Hierarchical Identity-based Encryption in Standard Model .....	CHEN Yu, QI Zheng-hua, WANG Xiang (110)
Research of Docker Security .....	LU Tao, CHEN Jie, SHI Jun (115)
Copy-move Forgery Detection Based on SIFT and K-means Clustering .....	YE Yu-qing, QIU Xiao-hui (121)
Prediction of Defect of Class-imbalance Sparse Reconstruction Metric Learning Software .....	SHI Zuo-ting, WU Di, JING Xiao-yuan, et al (125)
Research on Application of Multiple License Plate Recognition Algorithm Based on Machine Learning .....	ZHENG Gu-ping, YAN Bo-bo, LI Gang (129)
Research on Tuyere Erosion Identification Method of AOD Furnace Liner .....	QIU Dong, GUO Hong-tao, LIU Ming-shuo (133)
Design and Realization of Real-time Push System for Agricultural Moisture Early Warning Information .....	ZHENG Jiu-feng, YAO Kai-xue (137)
Vehicle Cooperative System Based on Vehicular Ad Hoc Network .....	MA Guang, KE Jin-chao, CHEN Na-jia, et al (142)
Research on a Data Structuralization Method of Bamboo Species Based on Regular Extraction Model .....	LI Xin, LI Shao-wen, XU Gao-jian, et al (147)
Optimal Control of Traffic Signal Coordination in Subarea Based on Phase Difference .....	HU Hai-tao, LUO Jie (151)
Research on Grating Signal Software Subdivision Technology Based on Neural Network .....	TANG Pan, ZHANG Hou-wu, HE Yong (156)
Truck Dimensions Measurement Based on Binocular Vision .....	WANG Qian, ZHANG Yan-bin (161)
Three-dimensional Simulation of Fallen Leaves Based on WebGL .....	ZHANG Wen-juan, WU Qiong, CAO Xin-ran (165)
Research on Key Technology of Unified Shader Architecture 3D Engine .....	DENG Yi, TIAN Ze, HAN Li-min (170)
Research on Cooperative Caching Strategy in Mobile Ad Hoc Networks .....	JIANG Quan, PAN Pei-sheng (174)
Parallel Tasks Scheduling Strategy Based on Correlation under Cloud Environment .....	DUAN Ju, YU Zhi-guo (178)
Research on Removed Object Detection Technique Based on Binocular Stereo Vision .....	ZHANG Ai-sheng, ZHANG Yan-bin (184)
High-level Architecture Multicast Extension Based on Computer Cooperative Work .....	ZHANG De-gang, WANG Da-da, LI Ze-he, et al (188)
Design and Implementation of Campus Recommendation System Based on CEP .....	ZHOU Bi, LU Shan, TANG Kun (192)
Design of a Remote Supervision System for Elderly Based on S3C6410 .....	ZHAO Shi-ci, HE Yong, BI Gan-bin (197)
A WSN Location Algorithm Based on Simulated Annealing Weighted DV_Hop .....	ZHANG Zhi-hua, ZHANG Ling-hua (201) 万方数据