

# 计算机工程(半月刊)

第37卷 第6期 2011年3月20日

## 目 次

### • 博士论文 •

基于 SAPSO 算法的单目视觉标定与测量.....	芮挺, 赵启林, 丁健, 等(1)
基于保矩算法的异性纤维特征提取方法.....	瞿鑫, 丁天怀(4)
基于查询词邻近度的专家搜索算法.....	杨柳, 张文生(7)
天线相关性对 D-MIMO 系统极限性能的影响.....	汪浩, 林孝康(9)
星载数字调零天线的调零策略研究.....	赵星惟, 吕源, 龚文斌, 等(12)
ICPN 的时间自动机构造方法.....	廖伟志, 李文敬, 王汝涼(15)
Hammerstein 模型的记忆效应盲辨识方法.....	胡啸, 马洪(18)
多主题文本摘要抽取的研究与实现.....	廖涛, 刘宗田, 王利(21)
基于改进曲面熵的动态水面模拟方法.....	王海玲, 印桂生, 张菁, 等(24)
单点定时信号配时的多目标优化模型.....	张萌萌, 贾磊, 邹难(27)

### • 软件技术与数据库 •

Web 文档评价对象抽取研究.....	许细清, 林世平(30)
基于 μCLinux 的大容量媒体文件系统.....	荣德杰, 倪宏, 潘梁, 等(32)
基于用户会话的 Web 测试集约简.....	陈欣, 高建华(35)
基于格网的多边形集合级联求并算法.....	张华鑫, 刘南, 刘仁义, 等(38)
证据理论的主观整合推理方法.....	杜元伟, 孙永河, 段万春(41)
基于动态输入追踪的模糊技术.....	黄奕, 曾平凡, 张美超(44)
基于 MSET 的框架变化点实例化模式挖掘.....	钟林辉, 李晖, 邓华锋, 等(46)
基于 TASC 模型的合同自动生成方法.....	张恒, 李自臣(49)
基于目标递进的 Web 服务组合方法.....	王成良, 冯欣(52)
基于凝聚式信息瓶颈的加权层次聚类算法.....	李寒, 郭禾, 王宇新, 等(55)
基于值剖视的编译优化.....	孔凡金, 黄春(58)
三维数据集中基于位运算的挖掘算法.....	彭学武, 王黎明(61)
航班信息抽取规则的自动生成技术.....	张志远, 徐涛, 冯霞(65)
非规则循环的 OpenMP 调度算法.....	张延红, 史永昌, 朱晓珺(68)
基于 CMP 的指针数据预取方法.....	朱会东, 黄永丽, 宋宝卫(71)
基于 Schema 的 XML 索引方法研究.....	邹伟伟, 宋余庆, 耿飙, 等(74)
高效快速排序算法研究.....	汤亚玲, 秦峰(77)
中文 RSS 信息自动检索与分类研究.....	李庆诚, 左珊珊, 董振华, 等(79)

### • 网络与通信 •

基于染色 Petri 网的 BGP 连接过程模型.....	王文化, 沈庆国, 韩春永, 等(82)
基于动态占空比的流量自适应 MAC 协议.....	廖照亮, 张烈平, 严华(85)
基于邻居信息表的移动 IPv6 切换研究.....	邱述威, 张霖, 周健, 等(88)
机会网络中元数据交换的改进方法.....	陈凯, 白星振(91)
非正弦时域正交调制性能分析及仿真.....	刘锡国, 王萌, 康家方(94)
基于 MIP 的 WiMax 终端退网研究.....	郭春旺, 唐鼎, 赵志军, 等(97)
基于效用优化的网络编码拥塞控制模型.....	吴智昊(100)
基于 SSOM 的网络流量分类方法.....	胡婷, 王勇, 陶晓玲(104)
多信道无线 Mesh 网络的多播信道分配算法.....	邱振谋, 姚国祥, 官全龙, 等(107)

### • 安全技术 •

SDTA: 一种适合密码处理的处理器结构.....	郭建军, 王志刚(110)
基于邻域与 FCM 的多小波域盲水印算法.....	龚劬, 余维, 聂小英(113)
无结构 P2P 网络的信任数据安全传输协议.....	林怀清, 戚玉华, 何如龙(116)
可信计算中基于属性的认证协议改进方案.....	钟翔, 沈为君(118)
AES 算法的 SIMD 指令集扩展方法与实现.....	卢仕听, 王帅, 韩军, 等(121)
具有高代数免疫阶的弹性布尔函数构造.....	董新锋, 宋云芬, 张文政, 等(124)
改进的蚂蚁聚类入侵检测方法.....	舒远仲, 吴文俊, 陈忠贵(127)
无标度网络中的边免疫策略.....	纪鹏, 葛洪伟(130)
电子投票匿名性分析.....	黄福人, 屈玉贵(133)

GPU 上 ECM 的快速实现.....	王雷, 赵龙, 韩文报(135)
基于身份加密的图像口令认证方案.....	章启恒, 唐西林(138)
<b>• 人工智能及识别技术 •</b>	
基于轨迹分析的自主导航性能评估方法.....	王勇鑫, 钱微, 金卓军, 等(141)
基于稀疏表达的视频文字检测方法.....	李心洁, 王春恒(145)
基于 Adaboost 的人脸与虹膜融合识别.....	高智英, 李斌(148)
基于改进聚类中心分析法的红外行人分割.....	高潮, 田翠翠, 郭永彩(151)
数字通信信号调制自动识别研究.....	张志民, 欧建平, 皇甫琪(153)
用于不平衡数据分类的 FE-SVDD 算法.....	方景龙, 王万良, 何伟成(157)
增量 Hessian LLE 算法研究.....	李厚森, 成礼智(159)
基于关键字关联及节点兴趣的搜索机制.....	左经文, 陈沛涛, 李斌, 等(162)
基于局部超平面的流形奇异值点去除算法.....	周红兵, 夏士雄, 周勇, 等(165)
需求可拆分的开放式车辆路径问题研究.....	李三彬, 柴玉梅, 王黎明(168)
基于共享邻居数的社团结构发现算法.....	刘微, 张大为, 鲁敏, 等(172)
基于多阶段假设的目标实时检测.....	蒲旭敏, 艾斯卡尔·艾木都拉, 向桂英(175)
求解批量流水线调度问题的改进和声搜索算法.....	韩红燕, 潘全科(178)
基于 KLT 和 BFGS 的人脸姿态估计.....	邱丽梅, 李青虹(181)
基于 SWGPSS 算法的多序列比对.....	徐小俊, 雷秀娟, 郭玲(184)
求解 OVRPTW 的多开始禁忌搜索算法.....	李三彬, 王黎明(187)
基于差分演化的自适应参数控制蚁群算法.....	崔娇, 黄少荣(190)
基于局部词频指纹的论文抄袭检测算法.....	秦玉平, 冷强奎, 王秀坤, 等(193)
搜索空间划分移动策略的研究与实现.....	何威, 曾碧(195)
带交通约束的多目标优化混合算法.....	侯文静, 马永杰, 摆玉龙(198)
<b>• 图形图像处理 •</b>	
小波模极大值在图像消噪中的应用.....	刘锐(200)
一种针对超大分辨率图像的分割填充算法.....	杜金津, 宋春林, 江兴歌, 等(203)
基于系数块的改进 SPIHT 算法.....	朱华亮, 修春娣, 韦志棉(206)
改进的多尺度 Retinex 算法及其应用.....	赵晓霞, 王汝琳(209)
视觉显著性的八叉树颜色量化方法.....	刘志福, 胡君(212)
感兴趣区域的非线性变换多描述编码.....	王初晓, 倪林, 刘权(215)
基于混合插值样条的保边缘图像插值算法.....	盛敏, 苏本跃(218)
一种半调图像的混合压缩方法.....	孔月萍, 崔文竹, 耿烨(221)
误差分散半调图像的有损压缩算法.....	耿烨, 孔月萍(223)
<b>• 工程应用技术与实现 •</b>	
基于数字地球的 WebGIS 开发及其应用.....	姜仁贵, 解建仓, 李建勋, 等(225)
振动故障诊断的 Petri 网模型及系统实现.....	黄敏, 张芳(228)
轨道交通安全计算机的研究与实现.....	游小明(231)
一种新型的桥梁健康检测算法.....	李静, 杨小帆, 孙启干(234)
IEEE 1588 协议在工业以太网中的实现.....	关松青, 肖昌炎, 夏晓荣(237)
基于可重构系统的亚可抢占任务调度算法.....	许新达, 徐成, 刘彦, 等(239)
高密度条码在现代物流业中的应用.....	张世乐, 吴百锋(242)
多核并行技术在三维场景加载中的应用.....	李皓, 郑晓薇(245)
<b>• 开发研究与设计技术 •</b>	
雷电监测数据三维可视化技术研究.....	迟文学, 刘达新, 庞文静, 等(247)
带局部交互的多星 TT&C 调度合作协同进化.....	陈峰, 武小悦(250)
基于 ArcGIS 的燃气行业信息管理系统.....	盛俊文, 何高奇, 阮彤, 等(253)
IPTV 平台实时检测系统的设计与实现.....	何杰, 刘朝斌, 杨岳湘, 等(256)
自相似网络论坛的模型研究.....	范文嵩, 曾剑平, 张世永(260)
基于并行处理的 RFID 防冲突算法.....	霍华, 王永杰(263)
无线移动视频监控原型研究.....	赵华军, 方钰(266)
基于解开操作的直角多边形随机生成算法.....	沈聪, 陆伟成, 魏哈一(269)
无向双环网络 $G(N; \pm r, \pm s)$ 的图形仿真算法.....	刘辉, 许发信, 方木云, 等(272)
基于 RFID 的边界虚拟参考标签定位算法.....	俱莹, 刘开华, 史伟光, 等(274)
基于视频指纹的快速视频拷贝检测方法.....	唐玉元, 欧阳建权(277)
基于相似负载的 iSCSI 透明可靠多播.....	张镇平, 谭怀亮, 周炜(280)
家庭宽带业务发展预测模型及其应用.....	蒋国瑞, 王晓谊(283)
一种新的实时系统内核调度算法.....	薛安琪, 屈玉贵, 赵宝华(286)
基于标记点检测的视线跟踪注视点估计.....	龚秀锋, 李斌, 邓宏平, 等(289)
改进的 T <sup>2</sup> -BIC 说话人二级分割算法.....	郑继明, 司可宁(291)

# Computer Engineering (Semimonthly)

Vol.37 No.6

20 March 2011

## Contents

Monocular Vision Calibration and Measurement Based on SAPSO Algorithm.....	RUI Ting, ZHAO Qi-ling, DING Jian, et al(1)
Feature Extraction Method of Foreign Fiber Based on Moment-preserving Algorithm.....	QU Xin, DING Tian-huai(4)
Expert Search Algorithm Based on Query Word Proximity.....	YANG Liu, ZHANG Wen-sheng(7)
Impact of Antenna Correlation on D-MIMO Systems Limiting Performance.....	WANG Hao, LIN Xiao-kang(9)
Research on Nulling Strategy of Satellite Digital Nulling Antenna.....	ZHAO Xing-wei, LV Yuan, GONG Wen-bin, et al(12)
Construction Method of Timed Automata for ICPN.....	LIAO Wei-zhi, LI Wen-jing, WANG Ru-liang(15)
Blind Identification Method of Memory Effect for Hammerstein Model.....	HU Xiao, MA Hong(18)
Research and Implementation of Summarization Extraction in Multiple Topics Document.....	LIAO Tao, LIU Zong-tian, WANG Li(21)
Dynamic Water Surface Simulation Method Based on Improved Surface Entropy.....	WANG Hai-ling, YIN Gui-sheng, ZHANG Jing, et al(24)
Multi-objective Optimization Model for Signal Timing of Signalized Intersection.....	ZHANG Meng-meng, JIA Lei, ZOU Nan(27)
Research on Evaluation Object Extraction from Web Document.....	XU Xi-qing, LIN Shi-ping(30)
Large-capacity Media File System Based on µLinux.....	LUAN De-jie, NI Hong, PAN Liang, et al(32)
Web Test Suite Reduction Based on User Session.....	CHEN Xin, GAO Jian-hua(35)
Cascaded Union Algorithm for Polygon Set Based on Grid.....	ZHANG Hua-xin, LIU Nan, LIU Ren-yi, et al(38)
Subjectivity and Objectivity Integrated Reasoning Approach of Evidence Theory.....	DU Yuan-wei, SUN Yong-he, DUAN Wan-chun(41)
Fuzzing Technique Based on Dynamic Input Tracking.....	HUANG Yi, ZENG Fan-ping, ZHANG Mei-chao(44)
Framework Hot-spot Instantiation Pattern Mining Based on MSET.....	ZHONG Lin-hui, LI Hui, DENG Hua-feng, et al(46)
Contract Automatic Generation Method Based on TASC Model.....	ZHANG Heng, LI Zi-chen(49)
Web Service Composition Approach Based on Goal Narrowing.....	WANG Cheng-liang, FENG Xin(52)
Weighted Hierarchical Clustering Algorithm Based on Agglomerative Information Bottleneck.....	LI Han, GUO He, WANG Yu-xin, et al(55)
Compile Optimization Based on Value-profile.....	KONG Fan-jin, HUANG Chun(58)
Bitwise-based Mining Algorithm in 3D Dataset.....	PENG Xue-wu, WANG Li-ming(61)
Auto Generation Technology for Flight Information Extraction Rules.....	ZHANG Zhi-Yuan, XU Tao, FENG Xia(65)
Irregular Loop Schedule Algorithm for OpenMP.....	ZHANG Yan-hong, SHI Yong-chang, ZHU Xiao-jun(68)
Pointer Data Prefetching Method Based on CMP.....	ZHU Hui-dong, HUANG Yong-li, SONG Bao-wei(71)
Research on XML Index Method Based on Schema.....	ZOU Wei-wei, SONG Yu-qing, GENG Biao, et al(74)
Study of High Efficiency Quick Sort Algorithm.....	TANG Ya-ling, QIN Feng(77)
Research on Automatic Retrieval and Classification for Chinese RSS Information.....	LI Qing-cheng, ZUO Shan-shan, DONG Zhen-hua, et al(79)
BGP Connection Process Model Based on Colored Petri Net.....	WANG Wen-hua, SHEN Qing-guo, HAN Chun-yong, et al(82)
Traffic-adaptive MAC Protocol Based on Dynamic Duty Cycle.....	LIAO Zhao-liang, ZHANG Lie-ping, YAN Hua(85)
Study of Mobile IPv6 Handoff Based on Neighbour Information Table.....	QIU Shu-wei, ZHANG Lin, ZHOU Jian, et al(88)
Improved Meta-data Exchange Approach in Opportunistic Networks.....	CHEN Kai, BAI Xing-zhen(91)
Performance Analysis and Simulation of Non-sinusoidal Orthogonal Modulation in Time Domain.....	LIU Xi-guo, WANG Meng, KANG Jia-fang(94)
Study of WiMax Terminal Exit Based on MIP.....	GUO Chun-wang, TANG Ding, ZHAO Zhi-jun, et al(97)
Congestion Control Model for Network Coding Based on Utility Optimization.....	WU Zhi-hao(100)
Network Traffic Classification Method Based on SSOM.....	HU Ting, WANG Yong, TAO Xiao-ling(104)
Channel Assignment Algorithm for Multicast in Multi-channel Wireless Mesh Network.....	QIU Zhen-mou, YAO Guo-xiang, GUAN Quan-long, et al(107)
SDTA: Processor Architecture Suitable for Cipher Processing.....	GUO Jian-jun, WANG Zhi-gang(110)
Blind Watermark Algorithm of Multi-wavelet Domain Based on Neighborhood and FCM.....	GONG Qu, YU Wei, NIE Xiao-ying(113)
Secure Transmission Protocol of Trust Data for Unstructured P2P Networks.....	LIN Huai-qing, QI Yu-hua, HE Ru-long(116)
Improved Scheme of Property-based Attestation Protocol in Trusted Computing.....	ZHONG Xiang, SHEN Wei-jun(118)
Method and Implementation of SIMD Instruction Set Extension for AES Algorithm.....	LU Shi-ting, WANG Shuai, HAN Jun, et al(121)
Construction of Resilient Boolean Function with High Algebraic Immunity Order.....	DONG Xin-feng, SONG Yun-fen, ZHANG Wen-zheng, et al(124)
Improved Ant Clustering Intrusion Detection Method.....	SHU Yuan-zhong, WU Wen-jun, CHEN Zhong-gui(127)
Edges Immunization Strategy in Scale-free Network.....	JI Peng, GE Hong-wei(130)
Anonymity Analysis of Electronic Voting.....	HUANG Fu-ren, QU Yu-gui(133)
Rapid Implementation of Elliptic Curve Methods of Factorization on Graphic Processing Unit.....	WANG Lei, ZHAO Long, HAN Wen-bao(135)

Graphical Password Authentication Scheme with Identity-Based Encryption.....	ZHANG Qi-heng, TANG Xi-lin(138)
Autonomous Navigation Performance Evaluation Method Based on Trajectory Analysis.....	WANG Yong-xin, QIAN Hui, JIN Zuo-jun, et al(141)
Video Text Detection Method Based on Sparse Representation.....	LI Xin-jie, WANG Chun-heng(145)
Face and Iris Fusion Recognition Based on Adaboost.....	GAO Zhi-ying, LI Bin(148)
Pedestrian Segmentation in Infrared Images Based on Improved Clustering Centers Analysis Algorithm.....	GAO Chao, TIAN Cui-cui, GUO Yong-cai(151)
Research on Automatic Modulation Recognition of Digital Communication Signal.....	ZHANG Zhi-min, OU Jian-ping, HUANGFU Kan(153)
FE-SVDD Algorithm for Imbalanced Data Classification.....	FANG Jing-long, WANG Wan-liang, HE Wei-cheng(157)
Research on Incremental Hessian LLE Algorithm.....	LI Hou-sen, CHENG Li-zhi(159)
Search Mechanism Based on Keyword Relationship and Node Interest.....	ZUO Jing-wen, CHEN Yuan-tao, LI Bin, et al(162)
Singular Value Point Removing Algorithm for Manifold Data Based on Locally Hyperplane.....	ZHOU Hong-bing, XIA Shi-xiong, ZHOU Yong, et al(165)
Research on Split Delivery Open Vehicle Routing Problem.....	LI San-bin, CHAI Yu-mei, WANG Li-ming(168)
Community Structure Detection Algorithm Based on Number of Shared Neighbors.....	LIU Wei, ZHANG Da-wei, JI Min, et al(172)
Real-time Target Detection Based on Multistage Hypothesis.....	PU Xu-min, Askar Hamdulla, Xiang Gui-ying(175)
Improved Harmony Search Algorithm for Lot-streaming Flow Shop Schedule Problem.....	HAN Hong-yan, PAN Quan-ke(178)
Face Pose Estimation Based on KLT and BFGS.....	QIU Li-mei, LI Qing-hong(181)
Multiple Sequence Alignment Based on SWGPSO Algorithm.....	XU Xiao-jun, LEI Xiu-juan, GUO Ling(184)
Multi-start Tabu Search Algorithm for Solving OVRPTW.....	LI San-bin, WANG Li-ming(187)
Adaptive Parameter Control Ant Colony Algorithm Based on Differential Evolution.....	CUI Jiao, HUANG Shao-rong(190)
Plagiarism-detection Algorithm for Scientific Papers Based on Local Word-frequency Fingerprint.....	QIN Yu-ping, LENG Qiang-kui, WANG Xiu-kun, et al(193)
Research and Implementation of Search Space Division and Movement Strategy.....	HE Wei, ZENG Bi(195)
Multi-objective Optimization Mixed Algorithm with Traffic Restriction.....	HOU Wen-jing, MA Yong-jie, BAI Yu-long(198)
Application of Wavelet Modulus Maxima in Image De-noising.....	LIU Yue(200)
Segmentation Filling Algorithm for Super Resolution Image.....	DU Jin-jin, SONG Chun-lin, JIANG Xing-ge, et al(203)
Improved SPIHT Algorithm Based on Block of Coefficients.....	ZHU Hua-liang, XIU Chun-di, WEI Zhi-mian(206)
Improved Multi-scale Retinex Algorithm and Its Application.....	ZHAO Xiao-xia, WANG Ru-lin(209)
Octree Color Quantization Method of Visual Saliency.....	LIU Zhi-fu, HU Jun(212)
Nonlinear Transformation Multiple Description Coding for ROI.....	WANG Reng-xiao, NI Lin, LIU Quan(215)
Edge-preserving Image Interpolation Algorithm Based on Blending Interpolation Spline.....	SHENG Min, SU Ben-yue(218)
Mixed Compression Method of Halftone Image.....	KONG Yue-ping, CUI Wen-zhu, GENG Ye(221)
Lossy Compression Algorithm of Error-diffusion Halftone Image.....	GENG Ye, KONG Yue-ping(223)
Development of WebGIS Based on Digital Earth and Its Applications.....	JIANG Ren-gui, XIE Jian-cang, LI Jian-xun, et al(225)
Petri Net Model of Vibration Fault Diagnosis and System Realization.....	HUANG Min, ZHANG Fang(228)
Research and Implementation of Safety Computer of Railway Transportation.....	YOU Xiao-ming(231)
New Bridge Health Detection Algorithm.....	LI Jing, YANG Xiao-fan, SUN Qi-gan(234)
Implementation of IEEE 1588 Protocol over Industrial Ethernet.....	GUAN Song-qing, XIAO Chang-yan, XIA Xiao-rong(237)
Secondary Preemptable Task Scheduling Algorithm Based on Reconfigurable System.....	XU Xin-da, XU Cheng, LIU Yan, et al(239)
Application of High Density Barcode in Modern Logistics Industry.....	ZHANG Shi-le, WU Bai-feng(242)
Application of Multi-core Parallel Technology in 3D Scene Loading.....	LI Zhe, ZHENG Xiao-wei(245)
Research on 3D Visualization Technology of Lightning Monitoring Data.....	CHI Wen-xue, LIU Da-xin, PANG Wen-jing, et al(247)
Cooperative Co-evolution with Local Interaction for Multi-Satellite TT&C Scheduling.....	CHEN Feng, WU Xiao-yue(250)
Gas Industry Information Management System Based on ArcGIS.....	SHENG Jun-wen, HE Gao-qi, RUAN Tong, et al(253)
Design and Implementation of IPTV Platform Real-time Detection System.....	HE Jie, LIU Chao-bin, YANG Yue-xiang, et al(256)
Research on Models of Self-similar Online Forum.....	FAN Wen-song, ZENG Jian-ping, ZHANG Shi-yong(260)
RFID Anti-collision Algorithm Based on Parallel Processing.....	HUO Hua, WANG Yong-jie(263)
Study on Wireless Mobile Video Surveillance Prototype.....	ZHAO Hua-jun, FANG Yu(266)
Random Generation Algorithm of Rectilinear Polygon Based on Untangling.....	SHEN Cong, LUK Wai-shing, WEI Han-yi(269)
Graph Simulation Algorithm for Bidirectional Double-loop Networks $G(N; \pm r, \pm s)$ .....	LIU Hui, XU Fa-xin, FANG Mu-yun, et al(272)
Boundary Virtual Reference Tags Location Algorithm Based on RFID.....	JU Ying, LIU Kai-hua, SHI Wei-guang, et al(274)
Rapid Video Copy Detection Method Based on Video Fingerprint.....	TANG Yu-yuan, OUYANG Jian-quan(277)
iSCSI Transparent Reliable Multicast Based on Similar Payload.....	ZHANG Zhen-ping, TAN Huai-liang, ZHOU Wei(280)
Prediction Model of Family Broadband Business Development and Its Application.....	JIANG Guo-rui, WANG Xiao-ji(283)
New Kernel Schedule Algorithm for Real-time System.....	XUE An-qi, QU Yu-gui, ZHAO Bao-hua(286)
Eye Tracking Gaze Estimation Based on Marker Detection.....	GONG Xiu-feng, LI Bin, DENG Hong-ping, et al(289)
Improved Two-stage T <sup>2</sup> -BIC Algorithm for Speaker Segmentation.....	ZHENG Ji-ming, SI Ke-ning(291)