

# 计算机工程(半月刊)

第37卷 第5期 2011年3月5日

## 目 次

### • 博士论文 •

北京城区环路交通系统模型研究型.....	葛志远, 赵富成, 黄鲁成(1)
基于改进 GA 的救援物资中转网点定位.....	李周清, 马祖军(4)
基于时态逻辑的协议 RSL 形式化描述.....	顾翔, 邱建林(7)
产出率并行加速比模.....	王之元(10)
基于人工免疫细胞模型的模糊聚类算法.....	王磊, 王伟, 李玉祥(13)
Wiki 网复杂网络特性分析.....	刘智洋, 刘鲁(16)
基于 CDMA 下行链路的功率最优化调度.....	彭烈新, 朱光喜, 边海龙, 等(19)
基于混合颜色空间的免疫组化图像分割研究.....	王慧, 江峰, 叶永安, 等(22)
基于 RSPHL 算法的圆形标志定位方法.....	任斌, 程良伦(25)
增强 Ad Hoc 网络可靠性的管理机制.....	郭虹, 兰巨龙, 刘洛琨(29)
基于非交叉路径的加权网络可靠性模型.....	赵娟, 郭平, 邓宏钟, 等(33)
基于时序马尔可夫链的分布式频谱检测.....	罗银辉, 华漫(35)

### • 软件技术与数据库 •

数据网格中高效的分布式存储策略.....	吕卫忠, 康红勋, 周园春, 等(38)
数据库中文件夹的整体存储与随机访问.....	李昌贵, 吕志平(41)
基于聚类分析的网络论坛意见领袖发现方法.....	王珏, 曾剑平, 周葆华, 等(44)
一种支持 XML 文档更新的编码方案.....	覃遵跃, 卓月明, 徐洪智, 等(47)
基于关键语义子树的间接跳转目标解析.....	白莉莉, 庞建民, 赵荣彩, 等(50)
哈林网络中 Steiner 树问题的线性时间算法.....	陆芸婷(53)
基于关系数据分析的知识服务模型.....	高雅田, 李春生, 富宇(56)
基于二维混合条件随机场的 Web 记录抽取模型.....	卓林, 杨舟, 赵朋朋, 等(59)
异构分布式负载均衡容错算法研究.....	邓建波, 张立臣(62)
基于概率分布及维度编码的关联规则挖掘.....	王盛, 董黎刚, 李群(65)
一种基于遗传算法的 TSP 建模方法.....	梁旗军, 舒坚, 樊鑫, 等(68)
一种非阻塞读文件系统的实现方法.....	熊安萍, 唐巍, 蒋溢(71)
自适应概念漂移的在线集成分类器.....	王黎明, 周驰(74)
基于障碍物群的 k 全局相异最优有序路径查询.....	孙冬瑛, 郭忠孝(77)
基于搜索引擎的 Deep Web 数据源发现.....	王海龙, 胡景芝, 赵朋朋, 等(79)
基于优化 RLSSVM 的软件失效模型.....	晁冰, 徐仁佐(83)
基于 Tuscany Das 的数据网格访问模型.....	陈吉荣(86)

### • 网络与通信 •

LTE-A 中基于准入控制的切换决策算法.....	王华, 李鲁群, 王力(88)
时频域联合校正的 PN 码相干捕获算法.....	马克明, 金梁, 黄开枝(91)
基于 $\alpha$ 稳定分布的空间瞬态光频谱估计.....	陈朝峰, 郭书超, 查代奉(94)
网络中心战指挥信息系统抗毁性研究.....	王欣, 姚佩阳, 周翔翔, 等(97)
面向复杂拓扑的 Relay 查找机制.....	张秀武, 郭锐锋, 孙建伟, 等(100)
无线局域网分布式自适应信道分配.....	孟李, 戴永, 陈益强(103)
基于非负矩阵分解的网络距离预测.....	陈善雄, 廖剑伟, 张林, 等(106)
基于跳数计数的 AODV 路由协议优化.....	雷向东, 阳文彬(109)
具有高对称性的小世界网络模型研究.....	张付仁, 刘浩(112)
无线传感器网络同步误差测量方法.....	徐朝农, 徐勇军(115)
基于时隙调度的 DTRA 改进协议.....	李洪生, 李颖, 王维(118)
基于路由最短路径树的动态多节点删除算法.....	梁德恒, 姚国祥, 官全龙(121)
基于连通面划分的多重虚拟骨干网轮换算法.....	方旭明, 史庭俊(124)
FC 仲裁环实现实时传输的带宽分配方法.....	尹旭峰, 马婕, 苑士华, 等(127)

### • 安全技术 •

基于串空间的安全协议自动化验证算法.....	张孝红, 李谢华(131)
------------------------	---------------

基于知识约简的网络入侵特征提取	史志才, 夏永祥(134)
基于 Curvelet 变换的鲁棒信息隐藏算法	曹玉强, 龚卫国, 柏森, 等(137)
一种改进的组播密钥管理方案	殷鹏鹏, 曹争, 陆正军(140)
可信匿名认证协议的研究与设计	周彦伟, 吴振强, 乔子芮(143)
RSA 公钥密码算法差分计时攻击研究	田军舰, 寇应展, 陈财森, 等(146)
广义指定多个验证者有序多重签名方案	张玉磊, 戴小武, 韩亚宁, 等(149)
基于可重构密码模块的 VPN 安全网关	褚有睿, 王志远, 欧阳旦(152)
基于 ZIP 文档格式的信息隐藏方法	李兵兵, 王衍波, 徐敏(155)
基于正则表示的 SQL 注入过滤模块设计	王伟平, 李昌, 段桂华(158)
嵌入式系统中的 SMACK 应用研究	阮越, 郑啸(161)
基于粗糙集和证据推理的网络入侵检测模型	叶清, 陈亚莎, 黄高峰(164)
一种 DES 密钥延长方法	邱伟星, 肖克芝, 倪昉, 等(167)
基于模糊距离的信息系统安全保障评估	徐萃华, 林家骏(169)
针对复合攻击的网络攻击预测算法	陈灿, 阎保平(172)
一种图像篡改可恢复的认证水印方法	黄良永(175)
具有失败中止性质的代理签名	钟翔(179)
针对校园网 ARP 攻击的主动防护方案	郭征, 吴向前, 刘胜全(181)
<b>• 人工智能及识别技术 •</b>	
基于近邻距离的大规模样本集去噪与减样	陈圣兵, 李龙澍(184)
基于支持向量的单类分类方法综述	吴定海, 张培林, 任国全, 等(187)
基于个体状态的粒子群优化算法	于泳海, 韩金仓(190)
基于改进 K-means 聚类的案例检索策略	乔丽, 姜慧霖, 贾世杰(193)
哈萨克语文本分类系统的设计与实现	玛依来·哈帕尔, 古丽拉·阿东别克(196)
一种改进的量子遗传算法及其应用	封安辉, 苏宏升(199)
基于弹簧模型的基因表达数据可视化聚类	颜文胜(202)
粒子群优化算法中的惯性权值非线性调整策略	周敏, 李太勇(204)
基于电阻网络的异构数据协同聚类算法	刘琰琼, 张文生, 李益群, 等(207)
一种改进的特征权重算法	张瑜, 张德贤(210)
基于信号传递的神经网络文本降维算法	钱晓东, 肖强, 王婷婷(213)
基于特征的弹性图匹配人脸识别算法改进	俞燕, 李正明(216)
基于二值数据贝叶斯空间的人脸识别算法	曾岳, 冯大政, 何新田(219)
并行自适应免疫量子粒子群优化算法	李红婵, 朱颖东(221)
子空间可能性聚类机制研究	关庆, 邓赵红, 王士同(224)
<b>• 图形图像处理 •</b>	
基于结构和纹理特征融合的场景图像分类	程刚, 王春恒(227)
局部熵驱动区域主动轮廓的局部化框架	辛维斌, 张善卿, 张桂戌(230)
基于 K 均值聚类的图割医学图像分割算法	吴永芳, 杨鑫, 徐敏, 等(232)
基于冰情图的极地 SAR 海冰图像分割	范良欢, 杨学志, 卢洁, 等(235)
植物叶子枯萎变形虚拟方法研究	邢方山, 何东健(238)
<b>• 工程应用技术与实现 •</b>	
基于 CCP 的 ECU 在线编程技术的实现	蒋建春, 陈洪霞, 郑太雄(241)
基于 PC-PLC 的实时海洋重力仪测控系统	许幼成, 韩波, 李平(244)
相似学原理在 MTTR 分组验证中的应用	高伏, 郭建平, 王松山(247)
基于局部重配置的 FPGA 互连测试诊断	马珂洁, 包杰, 周学功, 等(249)
基于 Geodatabase 模型的配电网拓扑算法	杨云涛, 郑森泉, 王靖宇(253)
<b>• 开发研究与设计技术 •</b>	
面向语音转换的汉语语料自动选取算法	沈亚敏, 赵晖, 张权, 等(256)
一种基于 SOA 的企业集成平台	张朝晖, 徐立臻, 董逸生, 等(258)
复杂地形环境下的电磁覆盖范围并行算法	周鋆, 朱承, 张维明, 等(261)
面向驾驶员特性的路径规划算法	龙科军, 王赛政, 肖向良(264)
基于区间相似度的动态服务协商模型	冯秀珍, 武高峰(267)
基于分级 Cache 的透明计算系统	谭成辉, 杨磊, 文建国, 等(270)
基于改进 ILS 算法的多目标优化试验设计	张昆仑, 郭波(273)
基于静态模拟的二进制控制流恢复算法	胡刚, 张平, 李清宝, 等(276)
基于 Proteus 的处理器 C++ 建模与仿真	杨鸿, 周晓方, 杨庆庆(279)
基于特征关键字的多协议数据流转换方法	林霞, 蔡声镇, 吴允平, 等(282)
适用于可编辑 WebGIS 的动态缓存策略	黄祥志, 刘南, 刘仁义, 等(285)
基于语音识别和语速修改的语音复读系统	梁育青, 杨鸿武, 郭威彤, 等(288)
实时全自动视频拼接方法	王小强, 陈临强, 梁旭(291)

# Computer Engineering (Semimonthly)

Vol.37 No.5

5 March 2011

## Contents

Traffic System Model Research of Beijing Urban Ring Road.....	GE Zhi-yuan, ZHAO Fu-cheng, HUANG Lu-cheng (1)
Transshipment Nodes Location of Relief Materials Based on Improved GA.....	LI Zhou-qing, MA Zu-jun(4)
Formal Description of Protocols with RAISE Specification Language Based on Temporal Logic.....	GU Xiang, QIU Jian-lin(7)
Productivity Parallel Speedup Model.....	WANG Zhi-yuan(10)
Fuzzy Clustering Algorithm Based on Artificial Immune Cell Model.....	WANG Lei, WANG Wei, LI Yu-xiang(13)
Complex Network Property Analysis of Wiki Network.....	LIU Zhi-yang, LIU Lu(16)
Power Optimization Schedule Based on CDMA Downlink.....	PENG Lie-xin, ZHU Guang-xi, BIAN Hai-long, et al(19)
Research on Immunohistochemical Image Segmentation Based on Hybrid Color Space.....	WANG Hui, JIANG Feng, YE Yong-an, et al(22)
Circle Mark Location Method Based on RSPHL Algorithm.....	REN Bin, CHENG Liang-lun(25)
Management Mechanism for Enhancing Ad Hoc Network Reliability.....	GUO Hong, LAN Ju-long, LIU Luo-kun(29)
Weighted Network Reliability Model Based on Disjoint Path.....	ZHAO Juan, GUO Ping, DENG Hong-zhong, et al(33)
Distributed Spectrum Detection Based on Sequential Markov Chain.....	LUO Yin-hui, HUA Man(35)
High Efficient Distributed Storage Scheme in Data Grid.....	LV Wei-zhong, KANG Hong-xun, ZHOU Yuan-chun, et al(38)
Whole Storage and Random Access of Folder in Database.....	LI Chang-gui, LV Zhi-ping(41)
Online Forum Opinion Leaders Discovering Method Based on Clustering Analysis.....	WANG Jue, ZENG Jian-ping, ZHOU Bao-hua, et al(44)
Encoding Scheme Supporting Update of XML Document.....	QIN Zun-yue, ZHUO YUE-ming, XU Hong-zhi, et al(47)
Analysis of Indirect Jump Target Based on Critical Semantic Subtree.....	BAI Li-li, PANG Jian-min, ZHAO Rong-cai, et al(50)
Linear Time Algorithm of Steiner Tree Problem in Halin Network.....	LU Yun-ting(53)
Knowledge Service Model Based on Relation Data Analysis.....	GAO Ya-tian, LI Chun-sheng, FU Yu(56)
Web Records Extraction Model Based on 2D Mixed Conditional Random Fields.....	ZHUO Lin, YANG Zhou, ZHAO Peng-peng, et al(59)
Study of Heterogeneous Distributed Load Balance Fault Tolerance Algorithm.....	DENG Jian-bo, ZHANG Li-chen(62)
Association Rules Mining Based on Probability Distribution and Dimensions Coding.....	WANG Sheng, DONG Li-gang, LI Qun(65)
TSP Modeling Method Based on Genetic Algorithm.....	LIANG Qi-jun, SHU Jian, FAN Xin, et al(68)
Implementation Method of File System with Non-blocking Read.....	XIONG An-ping, TANG Wei, JIANG Yi(71)
Online Ensemble Classifier for Adaptive Concept Drift.....	WANG Li-ming, ZHOU Chi(74)
$\kappa$ Globally Different Optimal Sequenced Route Query Based on Obstacles.....	SUN Dong-pu, HAO Zhong-xiao(77)
Deep Web Data Source Discovery Based on Search Engine.....	WANG Hai-long, HU Jing-zhi, ZHAO Peng-peng, et al(79)
Software Failure Model Based on Optimized RLSSVM.....	CHAO Bing, XU Ren-zuo(83)
Data Grid Access Model Based on Tuscany Das.....	CHEN Ji-rong(86)
Handoff Decision Algorithm Based on Admission Control in LTE-A.....	WANG Hua, LI Lu-qin, WANG Li(88)
PN Sequence Coherent Acquisition Algorithm with Time-frequency Domain Joint Correction.....	MA Ke-ming, JIN Liang, HUANG Kai-zhi(91)
Frequency Spectrum Estimation for Spacial Transient Optical Based on $\alpha$ -Stable Distribution.....	CHEN Zhao-feng, GUO Shu-chao, ZHA Dai-feng(94)
Research on Command Information System Invulnerability in Network-Centric Warfare.....	WANG Xin, YAO Pei-yang, ZHOU Xiang-xiang, et al(97)
Complicated Topology-oriented Relay Lookup Scheme.....	ZHANG Xiu-wu, GUO Rui-feng, SUN Jian-wei, et al(100)
Distributed Adaptive Channel Assignment in WLANs.....	MENG Li, DAI Yong, CHEN Yi-qiang(103)
Network Distance Prediction Based on Non-negative Matrix Factorization.....	CHEN Shan-xiong, LIAO Jian-wei, ZHANG Lin, et al(106)
Optimization of AODV Routing Protocol Based on Hop Count.....	LEI Xiang-dong, YANG Wen-bin(109)
Research on Small World Network Model with High Symmetry.....	ZHANG Fu-ren, LIU Hao(112)
Measurement Method of Synchronization Error for Wireless Sensor Networks.....	XU Chao-nong, XU Yong-jun(115)
Improved DTTRA Protocol Based on Slot Schedule.....	LI Hong-sheng, LI Ying, WANG Wei(118)
Dynamic Multi-node Remove Algorithm Based on Routing Shortest Path Tree.....	LIANG De-heng, YAO Guo-xiang, GUAN Quan-long(121)
Multiple Virtual Backbone Networks Rotation Algorithm Based on Connected Domatic Partition.....	FANG Xu-ming, SHI Ting-jun(124)
Bandwidth Allocation Method for FC-AL to Realize Real-time Transmission.....	YIN Xu-feng, MA Jie, YUAN Shi-hua, et al(127)
Automatic Verification Algorithm for Security Protocol Based on String Space.....	ZHANG Xiao-hong, LI Xie-hua(131)
Network Intrusion Feature Extraction Based on Knowledge Reduction.....	SHI Zhi-cai, XIA Yong-xiang(134)
Robust Information Hiding Algorithm Based on Curvelet Transform.....	CAO Yu-qiang, GONG Wei-guo, BAI Sen, et al(137)

Improved Multicast Key Management Scheme.....	YIN Peng-peng, CAO Zheng, LU Zheng-jun(140)
Research and Design of Trusted Anonymous Authentication Protocol.....	ZHOU Yan-wei, WU Zhen-qiang, QIAO Zi-rui(143)
Research of Differential Timing Attacks on RSA Public-key Cryptographic Algorithm.....	TIAN Jun-jian, KOU Ying-zhan, CHEN Cai-sen, et al(146)
Universal Designated Multi-verifiers Sequential Multi-signature Scheme.....	ZHANG Yu-lei, DAI Xiao-wu, HAN Ya-ning, et al(149)
VPN Security Gateway Based on Reconfigurable Cipher Module.....	CHU You-rui, WANG Zhi-yuan, OUYANG Dan(152)
Information Hiding Method Based on ZIP Document Format.....	LI Bing-bing, WANG Yan-bo, XU Min(155)
Design of SQL Injection Filtering Module Based on Regular Expression.....	WANG Wei-ping, LI Chang, DUAN Gui-hua(158)
Application Research of SMACK in Embedded System.....	RUAN Yue, ZHENG Xiao(161)
Network Intrusion Detection Model Based on Rough Set and Evidence Theory.....	YE Qing, CHEN Ya-sha, HUANG Gao-feng(164)
DES Key Extension Method.....	QIU Wei-xing, XIAO Ke-zhi, NI Fang, et al(167)
Information System Security Assurance Evaluation Based on Fuzzy Distance.....	XU Cui-hua, LIN Jia-jun(169)
Network Attack Forecast Algorithm for Multi-step Attack.....	CHEN Can, YAN Bao-ping(172)
Restorable Authentication Watermark Method for Image Tampering.....	HUANG Liang-yong(175)
Proxy Signature with Fail-stop Property.....	ZHONG Xiang(179)
Active Protection Scheme Against ARP Attack in Campus Network.....	GUO Zheng, WU Xiang-qian, LIU Sheng-quan(181)
Denoising and Sample Reduction for Large-scale Sample Set Based on Distance of Nearest Neighbors.....	CHEN Sheng-bing, LI Long-shu(184)
Review of One-class Classification Method Based on Support Vector.....	WU Ding-hai, ZHANG Pei-lin, REN Guo-quan, et al(187)
Particle Swarm Optimization Algorithm Based on Individual State.....	YU Yong-hai, HAN Jin-cang(190)
Case Retrieval Strategy Based on Improved K-means Clustering.....	QIAO Li, JIANG Hui-lin, JIA Shi-jie(193)
Design and Implementation of Kazakh Text Categorization System.....	Mayra Hapar, Gulila Altenbek(196)
Improved Quantum Genetic Algorithm and Its Application.....	FENG An-hui, SU Hong-sheng(199)
Gene Expression Data Visualization Clustering Based on Spring Model.....	YAN Wen-sheng(202)
Nonlinear Adjustment Strategy of Inertia Weight in Particle Swarm Optimization Algorithm.....	ZHOU Min, LI Tai-yong(204)
Co-clustering Algorithm for Heterogeneous Data Based on Resistive Network.....	LIU Yan-qiong, ZHANG Wen-sheng, LI Yi-qun, et al(207)
Improved Feature Weight Algorithm.....	ZHANG Yu, ZHANG De-xian(210)
Text Dimension Reduction Algorithm of Neural Network Based on Signal Transmission.....	QIAN Xiao-dong, XIAO Qiang, WANG Ting-ting(213)
Improvement of Feature-based Face Recognition Algorithm by Elastic Graph Matching.....	YU Yan, LI Zheng-ming(216)
Face Recognition Algorithm Based on Binary Bayesian Subspace.....	ZENG Yue, FENG Da-zheng, HE Xin-tian(219)
Parallel Adaptive Immune Quantum-behaved Particle Swarm Optimization Algorithm.....	LI Hong-chan, ZHU Hao-dong(221)
Research on Subspace Possibilistic Clustering Mechanism.....	GUAN Qing, DENG Zhao-hong, WANG Shi-tong(224)
Scene Image Categorization Based on Structure and Texture Feature Fusion.....	CHENG Gang, WANG Chun-heng(227)
Localizing Framework of Region-based Active Contours Driven by Local Entropy.....	XIN Wei-bin, ZHANG Shan-qing, ZHANG Gui-xu(230)
Graph Cuts Medical Image Segmentation Algorithm Based on K-means Clustering.....	WU Yong-fang, YANG Xin, XU Min, et al(232)
Polar SAR Sea Ice Image Segmentation Based on Ice Chart.....	FAN Liang-huan, YANG Xue-zhi, LU Jie, et al(235)
Study on Leaf Wilting Deformation Virtual Method.....	XING Fang-shan, HE Dong-jian(238)
Implementation of ECU's Online Programming Based on CCP.....	JIANG Jian-chun, CHEN Hong-xia, ZHENG Tai-xiong(241)
PC-PLC Based Real-time Monitoring and Control System of Marine Gravity Meter.....	XU You-cheng, HAN Bo, LI Ping(244)
Application of Similarity Theory in Grouping Verification of MTTR.....	GAO Fu, HAO Jian-ping, WANG Song-shan(247)
FPGA Interconnect Test and Diagnosis Based on Partial Reconfiguration.....	MA Ke-jie, BAO Jie, ZHOU Xue-gong, et al(249)
Topology Algorithm for Distribution Network Based on Geodatabase Model.....	YANG Yun-tao, ZHENG Sen-quan, WANG Jing-yu(253)
Automatic Selection Algorithm of Mandarin Corpus for Voice Conversion.....	SHEN Ya-min, ZHAO Hui, ZHANG Quan, et al(256)
SOA-based Enterprise Integration Platform.....	ZHANG Zhao-hui, XU Li-zhen, DONG Yi-sheng, et al(258)
Parallel Algorithm of Electromagnetic Wave Propagation in Complex Terrain Environment.....	ZHOU Yun, ZHU Cheng, ZHANG Wei-ming, et al(261)
Driver Character-oriented Algorithm for Route Planning.....	LONG Ke-jun, WANG Sai-zheng, XIAO Xiang-liang(264)
Dynamic Service Negotiation Model Based on Interval Similarity.....	FENG Xiu-zhen, WU Gao-feng(267)
Transparent Computing System Based on Hierarchical Cache.....	TAN Cheng-hui, YANG Lei, WEN Jian-guo, et al(270)
Experimental Design of Multi-objective Optimization Based on Modified ILS Algorithm.....	ZHANG Kun-lun, GUO Bo(273)
Control Flow Restoring Algorithm for Binary Program Based on Static Simulation.....	HU Gang, ZHANG Ping, LI Qing-bao, et al(276)
C++ Modeling and Simulation of Processor Based on Proteus.....	YANG Hong, ZHOU Xiao-fang, YANG Qing-qing(279)
Multi-protocol Data Stream Conversion Method Based on Characteristic Keyword.....	LIN Xia, CAI Sheng-zhen, WU Yun-ping, et al(282)
Dynamic Caching Strategy for Editable WebGIS.....	HUANG Xiang-zhi, LIU Nan, LIU Ren-yi, et al(285)
Speech Repeating System Based on Speech Recognition and Speaking Rate Modification.....	LIANG Qing-qing, YANG Hong-wu, GUO Wei-tong, et al(288)
Method of Real Time Automatic Video Stitching.....	WANG Xiao-qiang, CHEN Lin-qiang, LIANG Xu(291)