

# 计算机工程(半月刊)

第36卷 第15期 2010年8月5日

## 目次

### • 博士论文 •

- 基于随机 Hough 变换的零基线正弦曲线检测.....刘进, 马梁, 刘忠训, 等(1)  
基于组合索引的语义 Web 服务发现算法.....申建刚, 王理(4)  
基于 FARIMA 模型的流量抽样测量方法.....潘乔, 罗辛, 王高丽, 等(7)  
基于网络编码的 P2P-VoD 数据调度算法.....胡玉琦, 王勇, 蔡璐玮(9)  
编码分组网络的效用最大化研究.....王俊义(12)  
地月通信链路传输协议的研究与性能分析.....叶建设, 万鹏, 宋世杰(15)  
MPLS 网络故障检测环回机制.....肖宇峰, 李昕, 李玉宏(17)  
新闻报道文本的情感倾向性研究.....管红英, 郭明, 柴玉梅, 等(20)  
基于 ECN 阶跃标记的 TFRC 改进协议.....黄家玮, 王建新, 叶进(23)  
基于模糊理论的 Web 服务信任评估模型.....李季, 朱小勇(25)  
P2P 文件完整性校验延迟隐藏算法.....贺鹏程, 王劲林, 邓浩江, 等(29)  
一种高效的 DNS 日志压缩算法.....王艳峰, 王正, 阎保平(32)

### • 软件技术与数据库 •

- 基于语义映射的可配置信息索引方法.....方勇, 郑小林, 陈德人(36)  
用于文档聚类的间隔流形学习算法研究.....李昕, 钱旭, 王自强(40)  
具有 QoS 保障功能的服务网格资源映射策略.....花嵘, 傅游, 杜宇(43)  
二进制补丁比对中的指令归一化算法.....沈亚楠, 赵荣彩, 王小芹, 等(46)  
基于双路索引的 XML 查询优化研究.....万静, 姜蓉, 易军凯(49)  
面向实时嵌入式操作系统的进程机制.....周昕, 傅鹏, 黄海伦(51)  
快速自动程序流分析方法研究.....吴国伟, 曹厚华(55)  
基于功能替代模型的无冲突并发控制协议.....夏家莉, 韩增波, 陈辉(57)  
基于两阶段聚类的洗钱行为识别.....吴玉霞, 牟援朝(60)  
写入带宽限制下的流媒体缓存设计.....马杰(63)  
基于数据场和云模型的物料需求计划方法.....李新建, 刘启华(66)  
面向工作流和服务的电子邮件系统模型.....刘昌余, 王红军, 陈佳鑫, 等(68)  
基于 Java 的对象模型消息机制实现.....石博天, 高玉金, 朱凯(72)  
安全 Windows 终端软件系统的研究与实现.....李新明, 李艺, 张功萱, 等(74)  
实数域上的粗糙函数及其 Galois 格构建.....郭昱娥, 王俊红(77)  
面向存储服务的分布式缓存系统研究.....王侃, 陈志奎(80)  
基于频繁项集的多标签文本分类算法.....吕小勇, 石洪波(83)  
基于 GEP 的路径覆盖测试用例生成方法.....陈建明, 陈宇, 李志蜀, 等(86)  
基于场景模式的嵌入式软件测试用例设计.....杨广华, 齐璇, 施寅生(89)  
基于图分析的测试用例集优化.....罗文兵, 赵亮, 赵洪宇(92)  
一种降低 SQLite 擦写 Flash 频率的方法.....刘婷婷, 黄林春(94)  
嵌入式软件实时调度模型设计与仿真.....武海燕, 赵晓晶, 杨庆祥(97)

### • 网络与通信 •

- 基于发布/订阅系统的路由算法及其改进.....章韵, 汪传东(100)  
高速网络带宽测量方法研究.....王乐晓, 张延国, 赵晓楠(103)  
TriBA 互联拓扑结构及其性能分析.....刘彩霞, 石峰, 乔保军, 等(105)  
战术通信中异构 Ad-hoc 网络路由策略.....王硕, 李楠, 熊华钢(108)  
城市非连通车载自组网中低时延路由协议.....杜昱宏, 秦华标(111)  
基于连通覆盖度的 WSN 分簇协议.....马小飞, 缪亮, 范媛媛(114)  
基于代数重建法的 DV-Hop 定位算法.....杨智锋, 裴腾达, 裴炳南, 等(117)  
一种能量有效的 WSN 分簇路由算法.....王青正, 王晓婷, 郭拯危, 等(120)  
基于链路生存时间的多路径源路由协议.....陶金晶, 白光伟(123)  
基于拓扑结构和节点性能的应用层组播算法.....王新生, 张云超, 梁平, 等(126)  
基于 KL 距离的主/被动传感器最优选取跟踪.....苏英, 胡洪涛(129)

### • 安全技术 •

- 基于属性的访问控制策略模型.....程相然, 陈性元, 张斌, 等(131)  
基于协同特征的 BIOS Rootkit 检测技术.....邓立丰, 王宏霞(134)

基于读写优化的内核级加密文件系统	裴灿浩, 谢长生, 黄建忠(137)
网络入侵检测系统的最优特征选择方法	王 树, 杜启军, 余桂贤, 等(140)
RSA 密码分析中分解大整数的判定算法	孙克泉(142)
数字水印容量简化分析及模型优化	左卫群, 王新华(145)
基于 PUF 的低成本 RFID 系统安全协议	杨 灵, 闫大顺(148)
一种语音混沌保密通信方案的 DSP 实现	朱延钊(151)
基于智能卡的分布式数据传输安全模型	于正东, 李 艳(153)
高伪装高交互蜜罐技术的研究与实现	赵 军(156)
用于实现(k,e)-匿名模型的 MDAV 算法	夏赞珠, 韩建民, 于 娟, 等(159)
信任模型中虚假推荐过滤算法的改进	郭俊香, 宋俊昌(162)
<b>· 人工智能及识别技术 ·</b>	
基于生物记忆原理的智能伸展树模型	黄光球, 周 娇(164)
GMM 与 RVM 融合的话者辨识方法	郑建炜, 王万良, 郑泽萍(168)
基于群智能算法的玻璃切割问题求解研究	毛 力, 董 科, 沈明明, 等(171)
改进的变长检测器产生算法	杨铭魁(174)
基于多频域 LBP-TOP 的人脸表情识别	孔 健, 詹永照(176)
基于 CUDA 技术的卷积神经网络识别算法	张佳康, 陈庆奎(179)
有约束的登机门分配问题混合遗传算法	梁存利(182)
e-不敏感的光滑支持向量回归机的收敛性	陈 勇, 徐建敏(185)
基于固定增量单样本感知器的 AdaBoost 算法	申芳林, 刘建伟, 罗雄德, 等(188)
用于疲劳驾驶检测的人眼快速跟踪方法	彭召意, 周 玉, 朱文球(191)
<b>· 图形图像处理 ·</b>	
基于模糊推理的噪声图像边缘检测	郭芳侠, 梁 娟, 王 暄(194)
SAR 图像拼接效果的评价方法研究	姚汉英, 孙文峰, 李 平, 等(196)
基于分块和包围球误差函数的地形绘制方法	杨 莹, 冯立颖, 赵 静, 等(199)
基于边缘特征和能量的图像融合方法	罗南超, 向昌成(202)
基于 Lucy-Richardson 算法的图像复原	闫 河, 闫卫军, 李唯唯(204)
<b>· 多媒体技术及应用 ·</b>	
基于语义的体育视频场景分割方法	华 漫(206)
基于 H.264 码率控制的模型参数更新算法	龙昭华, 郑幸福, 程 宏, 等(208)
基于剧本及字幕信息的视频分割方法	李松斌, 王玲芳, 王劲林(211)
H.264 中基于预测方向的多模板切换运动估计	刘晓明, 高 燕, 李毓蕙, 等(214)
<b>· 工程应用技术与实现 ·</b>	
基于框架的虚拟装配系统研究	吴昌盛, 李云飞, 汪代勇, 等(216)
基于多线程技术的 GPS 罗盘数据采集与处理	刘瑞华, 项文杰(219)
视轴稳定系统的非接触式陀螺修正技术	陈 益, 薄煜明, 邹卫军(222)
EPA 一致性与互操作性测试系统设计	田民杰, 冯冬芹, 应群民, 等(225)
基于 CAN 总线的可重构 SHM 系统设计	郑 伟, 崔荣荣, 路 萍(228)
基于 Pro/E 的虚拟拆装系统	林积超, 韩国柱, 吴 松, 等(230)
高阶 QAM 信号盲均衡算法及其 FPGA 实现	吴 迪, 霍亚娟, 葛临东, 等(233)
油田事故应急救援可视化决策支持系统	高晓荣, 徐英卓(236)
<b>· 开发研究与设计技术 ·</b>	
基于 NSD 度分布函数的 LT 码构造	李 亮, 赵加祥, 袁 鑫(240)
双衰落信道下 OFDM 信噪比估计算法	段 鹏, 何明一, 薛敏彪(242)
动态按需加载算法在 GIS 地图中的应用	袁 满, 张乐英(245)
基于大脑神经元放电的脑-机接口技术	贾爱宾, 王 敏, 刘法胜(248)
基于 Grover 算法的通信系统信号检测	周立志, 李 飞(250)
基于盲波束形成的 CDMA 信号伪码估计	沈 雷(253)
基于多代理的个性化推荐学习系统	吴 兵, 叶春明, 陈 信(256)
基于 XCF32P 的多 FPGA 配置方案	张承畅, 严单贵, 杨力生, 等(259)
分层地层中的电磁波传播数值模拟	陈 鹏, 吴成明(262)
基于粒子群优化的光伏系统 MPPT 控制方法	刘艳莉, 周 航, 程 洋(265)
基于 MDA 的分布式建模仿真框架	程相东, 肖明清(268)
短波地空通信站址布局评估方法	伍 文, 达新宇, 刘芸江(271)
科技计划项目管理系统领域框架研究	潘俊俊, 徐小良(274)
南美白对虾货架期智能预测装置	刘慧芳, 陈 明, 谢 晶(277)
微处理器存储管理单元的功能验证方法	李 智, 周大钧, 龚令侃(280)
基于加权欧氏距离的替代率估算方法	滕在霞, 刘 悦, 高峻峻(283)
基于决策理论的模拟数字混合信号调制识别	何晓华, 谢建精, 李式巨, 等(286)
植物冠层光辐射分布的快速深度缓存算法	肖 强, 劳彩莲, 王春霞(288)
远程无线心电图监护仪的心电数据处理机制	万 里, 张 跃, 张龙飞(291)

# Computer Engineering (Semimonthly)

Vol.36 No.15

5 August 2010

## Contents

Detection of Zero Baseline Sinusoidal Curve Based on Randomized Hough Transform.....	LIU Jin, MA Liang, LIU Zhong-xun, et al (1)
Semantic Web Service Discovery Algorithm Based on Combined Index.....	SHEN Jian-gang, WANG Li (4)
Traffic Sampling Measurement Method Based on FARIMA Model.....	PAN Qiao, LUO Xin, WANG Gao-li, et al (7)
Data Scheduling Algorithm of P2P-VoD Based on Network Coding.....	HU Yu-qi, WANG Yong, CAI Lu-wei (9)
Study of Utility Maximization of Coded Packet Network.....	WANG Jun-yi (12)
Study and Performance Analysis of Transport Protocol over Cislunar Communication Links.....	YE Jian-she, WAN Peng, SONG Shi-jie (15)
Loopback Mechanism for MPLS Network Failure Detection.....	XIAO Yu-feng, LI Xin, LI Yu-hong (17)
Research on News Report Text Sentiment Tendency.....	ZAN Hong-ying, GUO Ming, CHAI Yu-mei, et al.(20)
Improved TFRC Protocol Based on ECN Step Marking.....	HUANG Jia-wei, WANG Jian-xin, YE Jin, et al (23)
Web Services Trust Evaluation Model Based on Fuzzy Theory.....	LI Ji, ZHU Xiao-yong (25)
Latency Hiding Algorithm for P2P File Integrity Verification.....	HE Peng-cheng, WANG Jin-lin, DENG Hao-jiang, et al (29)
Web Services Trust Evaluation Model Based on Fuzzy Theory.....	LI Ji, ZHU Xiao-yong (32)
Configurable Information Index Method Based on Semantic Mapping.....	FANG Yong, ZHENG Xiao-lin, CHEN De-ren (36)
Research on Marginal Manifold Learning Algorithm for Document Clustering.....	LI Xin, QIAN Xu, WANG Zi-qiang (40)
Research on QoS-guaranteed Resource Mapping Policy in Service Grid.....	HUA Rong, FU You, DU Yu (43)
Instruction Normalization Algorithm in Binary Patch Comparison.....	SHEN Ya-nan, ZHAO Rong-cai, WANG Xiao-qin, et al (46)
Research on Double Index-based XML Query Optimization.....	WAN Jing, JIANG Rong, YI Jun-kai (49)
Process Mechanism for Embedded Real-time Operating System.....	ZHOU Xin, FU Li, HUANG Hai-lun (51)
Study on Fast Automatic Program Flow Analysis Method.....	WU Guo-wei, CAO Hou-hua (55)
Conflict-free Concurrency Control Protocol Based on Function Alternative Model.....	XIA Jia-li, HAN Zeng-bo, CHEN Hui (57)
Money Laundering Recognition Based on Two-stage Clustering .....	WU Yu-xia, MOU Yuan-chao (60)
Streaming Media Cache Design with Writing Bandwidth Limitation.....	MA Jie (63)
Material Requirement Planning Method Based on Data Field and Cloud Model.....	LI Xin-jian, LIU Qi-hua (66)
Workflow and Service Oriented E-mail System Model.....	LIU Chang-yu, WANG Hong-jun, CHEN Jia-xin, et al (68)
Implementation of Message Mechanism for Object Model Based on Java.....	SHI Bo-tian, GAO Yu-jin, ZHU Kai (72)
Research and Implementation of Secure Windows Terminal Software System.....	LI Xin-ming, LI Yi, ZHANG Gong-xuan, et al (74)
Rough Function in Real Domain and Its Establishment of Galois Lattice.....	GUO Xian'e, WANG Jun-hong (77)
Research on Storage Service-oriented Distributed Cache System.....	WANG Kan, CHEN Zhi-kui (80)
Multi-label Text Classification Algorithm Based on Frequent Item Sets.....	LV Xiao-yong, SHI Hong-bo (83)
Generation Method of Path Coverage Test Case Based on GEP.....	CHEN Jian-ming, CHEN Yu, LI Zhi-shu, et al (86)
Design of Embedded Software Test Cases Based on Scenario Pattern.....	YANG Guang-hua, QI Xuan, SHI Yin-sheng (89)
Test Suite Optimization Based on Graph Analysis.....	LUO Wen-bing, ZHAO Liang, ZHAO Hong-yu (92)
Method for Reducing Frequency of Writing Flash in SQLite.....	LIU Ting-ting, HUANG Lin-chun (94)
Design and Simulation of Real-time Schedule Model for Embedded Software.....	WU Hai-yan, ZHAO Xiao-jing, YANG Qing-xiang (97)
Routing Algorithm Based on Publish/Subscribe System and Its Improvement .....	ZHANG Yun, WANG Chuan-dong (100)
Research of High-speed Network Bandwidth Measurement Method.....	WANG Le-xiao, ZHANG Yan-yuan, ZHAO Xiao-nan (103)
TriBA Interconnection Topology Structure and Its Performance Analysis.....	LIU Cai-xia, SHI Feng, QIAO Bao-jun, et al (105)
Heterogeneous Ad-hoc Network Routing Strategy in Tactical Communication.....	WANG Shuo, LI Qiao, XIONG Hua-gang (108)
Low Latency Routing Protocol in City Disconnected Vehicular Ad-hoc Network.....	DU Yu-hong, QIN Hua-biao (111)
WSN Clustering Protocol Based on Connectivity Coverage.....	MA Xiao-fei, MIAO Liang, FAN Yuan-yuan (114)
DV-Hop Localization Algorithm Based on Algebraic Reconstruction Technique.....	YANG Zhi-feng, PEI Teng-da, PEI Bing-nan, et al (117)
Energy Efficient Clustering Routing Algorithm for Wireless Sensor Networks.....	WANG Qing-zheng, WANG Xiao-ting, GUO Zheng-wei, et al (120)
Multipath Source Routing Protocol Based on Link-lifetime.....	TAO Jin-jing, BAI Guang-wei (123)
Application Layer Multicast Algorithm Based on Topology Architecture and Peer Performance.....	.....
.....	WANG Xin-sheng, ZHANG Yun-chao, LIANG Ping, et al (126)
Optimal-selection Tracking Based on KL Distance in Active/Passive Sensor.....	SU Ying, HU Hong-tao (129)
Attribute-Based Access Control Policy Model.....	CHENG Xiang-ran, CHEN Xing-yuan, ZHANG Bin, et al (131)

BIOS Rootkit Detection Technology Based on Cooperation Feature.....	DENG Li-feng, WANG Hong-xia (134)
Kernel-level Cryptographic File System Based on Read/Write Optimization.....	PEI Can-hao, XIE Chang-sheng, HUANG Jian-zhong (137)
Method of Choosing Optimal Characters for Network Intrusion Detection System.....	WANG Shu, DU Qi-jun, YU Gui-xian, et al (140)
Determine Algorithm of Large Integer Decomposition on RSA Cryptanalysis.....	SUN Ke-quan (142)
Simplified Analysis and Model Optimization for Digital Watermark Capacity.....	ZUO Wei-qun, WANG Xin-hua (145)
Security Protocol for Low-cost RFID System Based on PUF.....	YANG Ling, YAN Da-sun (148)
DSP Realization for Voice Chaotic Secrecy Communication Scheme.....	ZHU Yan-zhao (151)
Secure Model of Distributed Data Transmitting Based on Smart Card.....	YU Zheng-dong, LI Yan (153)
Research and Implementation of High Camouflage and Highly Interactive Honeypot Technology.....	ZHAO Jun (156)
MDAV Algorithm for Implementing $(k, e)$ -Anonymity Model.....	XIA Zan-zhu, HAN Jian-min, YU Juan, et al (159)
Improvement of Unfair Recommendation Filtering Algorithm in Trust Model.....	GUO Jun-xiang, SONG Jun-chang (162)
Intellectualized Stretching Tree Model Based on Biological Memory Principle.....	HUANG Guang-qiu, ZHOU Jiao (164)
Speaker Identification Approach of Hybrid GMM and RVM.....	ZHENG Jian-wei, WANG Wan-liang, ZHENG Ze-ping (168)
Study on Glass-block Cutting Problem Solving Based on Swarm Intelligent Algorithm.....	MAO Li, TONG Ke, SHEN Ming-ming, et al (171)
Improved Variable-length Detector Generation Algorithm.....	YANG Ming-kui (174)
Facial Expression Recognition Based on Multi-frequency LBP-TOP.....	KONG Jian, ZHAN Yong-zhao (176)
CUDA Technology Based Recognition Algorithm of Convolutional Neural Networks.....	ZHANG Jia-kang, CHEN Qing-kui (179)
Hybrid Genetic Algorithm for Constrained Airport Gate Assignment Problem.....	LIANG Cun-li (182)
Convergence of $\epsilon$ -insensitive Smooth Support Vector Regression.....	CHEN Yong, XU Jian-min (185)
AdaBoost Algorithm Based on Fixed Increment Simple Sample Perceptron.....	SHEN Fang-lin, LIU Jian-wei, LUO Xiong-lin, et al (188)
Fast Human Eyes Tracking Method for Drowsy Driving Detection.....	PENG Zhao-yi, ZHOU Yu, ZHU Wen-qiu (191)
Edge Detection for Noisy Images Based on Fuzzy Reasoning.....	GUO Fang-xia, LIANG Juan, WANG Xuan (194)
Research on Evaluation Methods of SAR Image Mosaic Effect.....	YAO Han-ying, SUN Wen-feng, LI Ping, et al (196)
Terrain Rendering Method Based on Blocking and Enclosing Ball Error Metric.....	YANG Ying, FENG Li-ying, ZHAO Jing, et al (199)
Image Fusion Method Based on Edge Characteristics and Energy.....	LUO Nan-chao, XIANG Chang-cheng (202)
Image Restoration Based on Lucy-Richardson Algorithm.....	YAN He, YAN Wei-jun, LI Wei-wei (204)
Semantic-based Scene Annotation Method of Sport Video.....	HUA Man (206)
Model Parameter Update Algorithm Based on Rate Control for H.264.....	LONG Zhao-hua, ZHENG Xing-fu, CHENG Hong, et al (208)
Video Segmentation Method Based on Film Script and Subtitle Information.....	LI Song-bin, WANG Ling-fang, WANG Jin-lin (211)
Multi-template Switch Motion Estimation Based on Prediction Direction in H.264.....	LIU Xiao-ming, GAO Yan, LI Yu-hui, et al (214)
Research on Virtual Assembly System Based on Framework.....	WU Chang-sheng, LI Yun-fei, WANG Dai-yong, et al (216)
GPS Compass Data Acquisition and Processing Based on Multi-thread Technology.....	LIU Rui-hua, XIANG Wen-jie (219)
Non-contact Gyro Correction Technology for Line of Sight Stabilization System.....	CHEN Yi, BO Yu-ming, ZOU Wei-jun (222)
Design of EPA Conformance and Interoperability Test System.....	TIAN Min-jie, FENG Dong-qin, YING Qun-min, et al (225)
Design of Reconfigurable SHM System Based on CAN Bus.....	ZHENG Wei, CUI Rong-rong, LU Ping (228)
Virtual Disassembly System Based on Pro/E.....	LIN Ji-chang, HAN Guo-zhu, WU Song, et al (230)
Blind Equalization Algorithm of High-order QAM Signal and Its FPGA-based Implementation.....	WU Di, HUO Ya-juan, GE Lin-dong, et al (233)
Visualization Decision-making Support System for Oilfield Accident Emergency Rescue.....	GAO Xiao-rong, XU Ying-zhuo (236)
Construction of LT Codes Based on NSD Degree Distribution Function.....	LI Liang, ZHAO Jia-xiang, YUAN Xin (240)
SNR Estimation Algorithm for OFDM Under Double Fading Channel.....	DUAN Peng, HE Ming-yi, XUE Min-biao (242)
Application of Dynamic On-demand Loading Algorithm in GIS Map.....	YUAN Man, ZHANG Le-ying (245)
Brain-Computer Interface Technology Based on Brain Neuronal Discharge.....	JIA Ai-bin, WANG Min, LIU Fa-sheng (248)
Signal Detection of Communication Systems Based on Grover Algorithm.....	ZHOU Li-zhi, LI Fei (250)
Signal Pseudocode Estimation for CDMA Based on Blind Beamforming.....	SHEN Lei (253)
Personalized Recommendation Learning System Based on Multi-Agent.....	WU Bing, YE Chun-ming, CHEN Xin (256)
Multi-FPGA Configuration Scheme Based on XCF32P.....	ZHANG Cheng-chang, YAN Dan-gui, YANG Li-sheng, et al (259)
Numerical Simulation of Electromagnetic Waves Propagation in Stratified Stratum.....	CHEN Peng, WU Cheng-ming (262)
MPPT Control Method of PV System Based on PSO.....	LIU Yan-li, ZHOU Hang, CHENG Ze (265)
Distributed Modeling and Simulation Framework Based on MDA.....	CHENG Xiang-dong, XIAO Ming-qing (268)
Evaluation Method of Sites-setting for Short Wave Air-to-Ground Communication.....	WU Wen, DA Xin-yu, LIU Yun-jiang (271)
Research on Domain Framework for Science and Technology Plan Project Management System.....	PAN Jun-jun, XU Xiao-liang (274)
Intelligent Shelf-life Prediction Device of Peneaus Vannamei.....	LIU Hui-fang, CHEN Ming, XIE Jing (277)
Functional Verification Method for Memory Management Unit of Microprocessors.....	LI Zhi, ZHOU Da-jun, GONG Ling-kan (280)
Substitution Rate Estimation Method Based on Weighted Euclid Distance.....	TENG Zai-xia, LIU Yue, GAO Jun-jun (283)
Modulation Recognition for Analog and Digital Mixed Signal Based on Decision Theory.....	HE Xiao-hua, XIE Jian-jing, LI Shi-ju, et al (286)
Fast Z-buffer Algorithm of Solar Radiation Distribution in Plant Canopy.....	XIAO Qiang, LAO Cai-lian, WANG Chun-xia (288)
ECG Data Processing Mechanism of Remote Wireless ECG Monitor.....	WAN Li, ZHANG Yue, ZHANG Long-fei (291)