

计 算 机 科 学

(JISUANJI KEXUE)

第 46 卷 第 7 期 2019 年 7 月

目 次

综述

- | | |
|----------------------------|--------------|
| 1 互联网域内路由可用性综述 | 耿海军 张 爽 尹 霞 |
| 7 基于深度学习的机器阅读理解综述 | 李舟军 王昌宝 |
| 13 风格线条画生成技术综述 | 刘子奇 刘世光 |
| 22 帕金森震颤与原发性震颤的计算机辅助诊断方法综述 | 张雨倩 顾冬云 |
| 30 目标形状表达算法综述 | 吴 刚 徐利敏 |
| 38 面向展示广告的点击率预测模型综述 | 刘梦娟 曾贵川 岳 威等 |

网络与通信

- | | |
|--------------------------------------|--------------|
| 50 一种内容中心型车载社交网络路由机制 | 石峻岭 王兴伟 黄 敏 |
| 56 基于分层多跳物理层网络编码的超密集网络吞吐量增强方法 | 冀保峰 王一丹 邢冰冰等 |
| 61 LTE-A 网络下能源高效的 M2M 上行子载波和功率分配问题研究 | 何英庆 李 宁 王 聪等 |
| 67 免声速迭代式 TDOA 测向研究 | 侯东升 汪 海 崔逊学 |
| 74 城市车辆自组织网络中基于预测的地理位置路由协议 | 黄德玲 严余松 彭大芹 |
| 81 多个体切换网络中带有时延通信的分布式次梯度优化算法 | 王俊雅 李甲地 李德权 |

信息安全

- | | |
|-------------------------------|--------------|
| 86 基于递归神经网络的恶意程序检测研究 | 王乐乐 汪斌强 刘建港等 |
| 91 抗内部关键词猜测攻击的高效公钥可搜索加密方案 | 王少辉 张彦轩 王化群等 |
| 96 云存储服务中一种高效属性撤销的 AB-ACCS 方案 | 乔 毛 秦 岭 |
| 102 基于认知诊断理论的网络安全自适应测试技术 | 齐 斌 王 宇 邹红霞等 |
| 108 基于 N-Gram 的 SQL 注入检测研究 | 万卓昊 徐冬冬 梁 生等 |
| 114 云计算下可撤销的全外包 CP-ABE 方案 | 江泽涛 黄 锦 胡 硕等 |
| 120 基于 Petri 网编码的动态图水印技术研究 | 苏 庆 林 昊 黄剑锋等 |

软件与数据库技术

- | | |
|---------------------------|--------------|
| 126 一种基于程序切片相似度匹配的脆弱性发现方法 | 刘 强 况晓辉 陈 华等 |
| 133 基于 SEH 的漏洞自动检测与测试用例生成 | 黄 钊 黄曙光 邓兆琨等 |
| 139 基于 Coq 记录的矩阵形式化方法 | 马振威 陈 钢 |
| 146 基于粒子群优化算法的测试用例生成方法 | 张 娜 滕赛娜 吴 彪等 |

人工智能

151 基于双向注意力机制的问答情感分类方法	沈忱林 张 璐 吴良庆 等
157 基于粗糙集和果蝇优化算法的特征选择方法	方 波 陈红梅 王生武
165 基于定向变异布谷鸟算法的配送路径问题	刘晓珍 刘景森
172 基于强化表征学习深度森林的文本情感分类	韩 慧 王黎明 柴玉梅 等
180 基于近似牛顿法的分布式卷积神经网络训练	王雅慧 刘 博 袁晓彤
186 带有时间标签的流行社交位置发现	刘长赞 杨宇迪 周丽华 等
195 多智能体模态逻辑系统 $KD45_n$ 中的知识遗忘	文习明 方良达 余 泉 等
206 具有生物真实性的强抗噪性神经元激活函数	麦应潮 陈云华 张 灵
211 改进 K 均值聚类的海洋数据异常检测算法研究	蒋 华 武 尧 王 鑫 等
217 基于稀疏贝叶斯学习的协同进化时间序列缺失数据预测算法	宋晓祥 郭 艳 李 宁 等
224 模糊自适应排序变异多目标差分进化算法	董明刚 刘 宝 敬 超

图形图像与模式识别

233 面向行车视频目标实时检测的轻量级 SSD 网络	张琳娜 陈建强 陈晓玲 等
238 基于联合图像块聚类自适应字典学习的多模态医学图像融合	王丽芳 史超宇 蔺素珍 等
246 基于主题融合和关联规则挖掘的图像标注	张 蕾 蔡 明
252 融合多层卷积特征的相关滤波运动目标跟踪算法	李健鹏 尚振宏 刘 辉
258 基于改进脉冲耦合神经网络的图像分割方法	王 燕 许宪法
263 增强旋转不变 LBP 算法及其在图像检索中的应用	孙 伟 赵玉普
268 基于四通道不可分加性小波的多聚焦图像融合	刘 斌 湛文江 辛迦楠
274 基于深度学习的几何特征匹配方法	李 健 杨祥如 何 斌
280 基于单视图三维重建的凹凸制造特征识别	苗绘翠 王吉华 张全英
286 基于 SIFT 算法的大场景视频拼接算法及优化	杨思燕 贺国旗 刘如意

交叉与前沿

292 基于时空特征的地铁客流预测	张和杰 马维华
300 相关性和相似度联合的癌症分类预测	张学扶 曾 攀 金 敏
308 基于速度控制的自动化码头 AGV 无冲突路径规划	仲美稣 杨勇生 周亚民
315 基于流程切的过程模型挖掘方法	宋 健 方贤文 王丽丽
322 基于时空特征挖掘的交通流量预测方法	孔繁钰 周愉峰 陈 纲
327 光照度聚类和支持向量机在路灯节能控制策略中的应用	文俊浩 万 园 曾 骏 等
333 动态阈值结合全局优化的船舶 AIS 轨迹在线压缩算法	宋 鑫 朱宗良 高银萍 等

COMPUTER SCIENCE

Vol. 46 No. 7 July 2019

CONTENTS

Surveys

- | | | |
|----|--|----------------------|
| 1 | Overview of Routing Availability in Intra-domain Routing Networks | GENG Hai-jun et al. |
| 7 | Survey on Deep-learning-based Machine Reading Comprehension | LI Zhou-jun et al. |
| 13 | Summary of Stylized Line Drawing Generation | LIU Zi-qi et al. |
| 22 | Review of Computer Aided Diagnosis for Parkinson's Tremor and Essential Tremor | ZHANG Yu-qian et al. |
| 30 | Review of Shape Representation for Objects | WU Gang et al. |
| 38 | Review on Click-through Rate Prediction Models for Display Advertising | LIU Meng-juan et al. |

Network & Communication

- | | | |
|----|---|-----------------------|
| 50 | Content-centric Routing Scheme in Vehicular Social Networks | SHI Jun-ling et al. |
| 56 | Enhancement Method of Throughput in Ultra-dense Network Based on Hierarchical Multi-hop Physical Layer Network Coding | JI Bao-feng et al. |
| 61 | Study on Energy Efficient M2M Uplink Subcarrier and Power Allocation in LTE-A Network | HE Ying-qing et al. |
| 67 | Study on TDOA Direction Finding of Iterative Model Without Sound Speed | HOU Dong-sheng et al. |
| 74 | Geographic Routing Protocol Based on Prediction for Urban Vehicular Ad Hoc Networks | HUANG De-ling et al. |
| 81 | Distributed Subgradient Optimization Algorithm with Communication Delays for Multi-agent Switched Networks | WANG Jun-ya et al. |

Information Security

- | | | |
|-----|--|----------------------|
| 86 | Study on Malicious Program Detection Based on Recurrent Neural Network | WANG Le-le et al. |
| 91 | Efficient Public-key Searchable Encryption Scheme Against Inside Keyword Guessing Attack | WANG Shao-hui et al. |
| 96 | AB-ACCS Scheme for Revocation of Efficient Attributes in Cloud Storage Services | QIAO Mao et al. |
| 102 | Adaptive Testing Technology Based on Cognitive Diagnostic in Cybersecurity | QI Bin et al. |
| 108 | Study on SQL Injection Detection Based on <i>N</i> -Gram | WAN Zhuo-hao et al. |
| 114 | Fully-outsourcing CP-ABE Scheme with Revocation in Cloud Computing | JIANG Ze-tao et al. |
| 120 | Study on Dynamic-graph Watermarking Based on Petri Net Coding | SU Qing et al. |

Software & Database Technology

- | | | |
|-----|--|--------------------|
| 126 | Vulnerability Discovery Approach Based on Similarity Matching of Program Slicing | LIU Qiang et al. |
| 133 | Automatic Vulnerability Detection and Test Cases Generation Method for Vulnerabilities Caused by SEH | HUANG Zhao et al. |
| 139 | Matrix Formalization Based on Coq Record | MA Zhen-wei et al. |
| 146 | Test Case Generation Method Based on Particle Swarm Optimization Algorithm | ZHANG Na et al. |

Artificial Intelligence

- 151 Sentiment Classification Towards Question-Answering Based on Bidirectional Attention Mechanism
SHEN Chen-lin et al.
- 157 Feature Selection Algorithm Based on Rough Sets and Fruit Fly Optimization
FANG Bo et al.
- 165 Distribution Routing Problem Based on Cuckoo Search Algorithm with Directional Mutation
LIU Xiao-zhen et al.
- 172 Text Sentiment Classification Based on Deep Forests with Enhanced Features
HAN Hui et al.
- 180 Distributed Convolutional Neural Networks Based on Approximate Newton-type Method
WANG Ya-hui et al.
- 186 Discovering Popular Social Location with Time Label
LIU Chang-yun et al.
- 195 Knowledge Forgetting in Multi-agent Modal Logic System *KD45_n*
WEN Xi-ming et al.
- 206 Bio-inspired Activation Function with Strong Anti-noise Ability
MAI Ying-chao et al.
- 211 Study on Ocean Data Anomaly Detection Algorithm Based on Improved K-means Clustering
JIANG Hua et al.
- 217 Missing Data Prediction Algorithm Based on Sparse Bayesian Learning in Coevolving Time Series
SONG Xiao-xiang et al.
- 224 Multi-objective Differential Evolution Algorithm with Fuzzy Adaptive Ranking-based Mutation
DONG Ming-gang et al.

Graphics, Image & Pattern Recognition

- 233 Lightweight SSD Network for Real-time Object Detection in Automotive Videos
ZHANG Lin-na et al.
- 238 Multi-modal Medical Image Fusion Based on Joint Patch Clustering of Adaptive Dictionary Learning
WANG Li-fang et al.
- 246 Image Annotation Based on Topic Fusion and Frequent Patterns Mining
ZHANG Lei et al.
- 252 Visual Object Tracking Algorithm Based on Correlation Filters with Hierarchical Convolutional Features
LI Jian-peng et al.
- 258 Image Segmentation Method Based on Improved Pulse Coupled Neural Networks
WANG Yan et al.
- 263 Enhanced Rotation Invariant LBP Algorithm and Its Application in Image Retrieval
SUN Wei et al.
- 268 Multifocus Image Fusion Based on Four Channel Non-separable Additive Wavelet
LIU Bin et al.
- 274 Geometric Features Matching with Deep Learning
LI Jian et al.
- 280 Concave-convex Manufacturing Features Recognition Based on 3D Reconstruction of Single View
MIAO Hui-cui et al.
- 286 Video Stitching Algorithm Based on SIFT and Its Optimization
YANG Si-yan et al.

Interdiscipline & Frontier

- 292 Subway Passenger Flow Forecasting Model Based on Temporal and Spatial Characteristics
ZHANG He-jie et al.
- 300 Cancer Classification Prediction Model Based on Correlation and Similarity
ZHANG Xue-fu et al.
- 308 Free-conflict AGV Path Planning in Automated Terminals Based on Speed Control
ZHONG Mei-su et al.
- 315 Process Model Mining Method Based on Process Cut
SONG Jian et al.
- 322 Traffic Flow Prediction Method Based on Spatio-Temporal Feature Mining
KONG Fan-yu et al.
- 327 Application of Illumination Clustering and SVM in Energy-saving Control Strategy of Street Lamps
WEN Jun-hao et al.
- 333 Vessel AIS Trajectory Online Compression Algorithm Combining Dynamic Thresholding and Global Optimization
SONG Xin et al.