

计算机科学

(JISUANJI KEXUE)

第 45 卷 第 12 期 2018 年 12 月

目 次

综述

- | | |
|----------------------|--------------|
| 1 人工智能与法律结合的现状与发展趋势 | 黄俏娟 罗旭东 |
| 12 区块链系统的数据存储与查询技术综述 | 王千阁 何 蒲 聂铁铮等 |
| 19 DTN 体系结构及关键技术研究综述 | 黄星河 李艾静 王 海 |
| 24 网络资产探测技术研究 | 王宸东 郭渊博 甄帅辉等 |
| 32 物联网通信协议的安全研究综述 | 杨 伟 何 杰 万亚东等 |
| 42 基于深度信息的动态手势识别综述 | 陈甜甜 姚 璜 左明章等 |
| 52 轮胎花纹图像检索技术综述 | 刘 颖 张 帅 葛瑜祥等 |

网络与通信

- | | |
|--------------------------------|--------------|
| 61 一种基于节点位置余弦相似度的机会网络转发算法 | 朱 坤 刘林峰 吴家皋 |
| 66 基于元胞遗传机制的虚拟网络映射算法 | 王 明 庄 雷 王国卿等 |
| 71 基于位置吸引力的加权复杂供应链网络局域世界演化模型研究 | 赵志刚 周根贵 潘瑞芳 |
| 77 无线传感器网络中蒙特卡洛定位算法的研究 | 张绮曼 张 颖 |
| 81 基于前缀路由策略的无线传感器网络任播路由协议 | 顾云丽 徐 昕 杜 杰 |
| 86 一种延长目标覆盖网络寿命的群智能算法 | 范兴刚 刘 涛 胡凤丹等 |

信息安全

- | | |
|---------------------------|--------------|
| 92 面向云环境的一致性可验证单关键词检索方法 | 戴 华 保静静 朱向洋等 |
| 98 面向风险评估的专家权重自适应调整方法 | 冷 强 杨英杰 胡 浩 |
| 104 链路相关性欺骗攻击与检测机制 | 徐佳佳 白光伟 沈 航 |
| 111 基于行为特征分析的微博恶意用户识别 | 夏崇欢 李华康 孙国梓 |
| 117 基于形式概念分析的语义角色挖掘算法 | 周 超 任志宇 毋文超 |
| 123 基于智能蜂群算法的 DDoS 攻击检测系统 | 余学山 韩德志 杜振鑫 |

人工智能

- | | |
|---------------------------------|--------------|
| 130 基于触发词语义选择的 Twitter 事件共指消解研究 | 魏 萍 巢文涵 罗准辰等 |
| 137 基于趋势强度的 SAT 问题学习子句评估算法 | 陈青山 徐 扬 吴贯锋 |

万方数据

142 基于主题增强的递归自编码情感分类研究	朱 引 黄海燕
148 基于随机森林的文本分类并行化	彭 徵 王灵娇 郭 华
153 基于序贯三支决策的多粒度情感分类方法	张刚强 刘 群 纪良浩
160 直觉模糊框架内的证据动态可靠性评估及应用	吴文华 宋亚飞 刘 晶
166 一种考虑等级语义关联的证据推理决策方法	张美璟 王应明
170 基于优化 BP 神经网络的物理量回归方法	潘俊虹 王宜怀 吴 薇
177 基于改进激活函数的用于台风等级分类的深度学习模型	郑宗生 刘兆荣 黄冬梅等
182 基于特征内相关和互信息的加权 SVM 算法	彭晓冰 朱玉全
187 基于 Repast Symphony 平台的人群运动行为仿真及优化	刘文龙 张 晶 周绥平等
192 一种基于关联-层次的飞机复杂机电组件虚拟维修建模方法	董健康 唐 超 耿 宏
196 改进 UCT 算法在爱斯坦棋中的应用	张小川 李 琴 南 海等
201 基于终态神经网络的冗余机械臂重复运动规划	孔 颖 孙明轩

图形图像与模式识别

206 基于局部特征多轴旋转不变特性的纹理图像分类算法	黄庆宇 章登义
210 基于 L1 与 TV 正则化的改进图像重建算法	徐敏达 李志华
217 基于 NSST 与自适应 PCNN 的多聚焦图像融合方法	杨利素 王 雷 郭 全
223 基于自适应主动学习与联合双边滤波的高光谱图像分类	李昌利 张 琳 樊棠怀
229 基于生成对抗网络的图像修复	孙 全 曾晓勤
235 基于前馈上下文和形状先验的平面标注方法	郭燕飞 刘宏哲 袁家政等
243 基于多尺度空谱鉴别特征的高光谱图像分类	任守纲 万 升 顾兴健等
251 基于双图正则的半监督 NMF 混合像元解混算法	邹 丽 蔡希彪 孙 静等
255 基于多任务卷积神经网络的舌象分类研究	汤一平 王丽冉 何 霞等
262 基于 SOM 聚类的垃圾处理方式可视化分析方法	秦绪佳 单扬洋 徐 菲等

交叉与前沿

268 基于出行模式子图的城市功能区域发现方法	肖 飞 王 悦 梅逸男等
279 基于社会网络分析法对信息流空间传播特征的研究	毕硕本 黄 铜 赵 爱等
288 一种基于用户移动行为相似性的位置预测方法	李昇智 乔建忠 林树宽
293 一种基于网络编码的云存储系统	刘宴涛 刘 珩
299 一种基于 MapReduce 的不确定图上的相似性连接方法	缪丰羽 王宏志 阮群生
308 基于 RNA-Seq 数据集的转录组从头拼接算法	武思文 李 静 张少强

COMPUTER SCIENCE

Vol. 45 No. 12 Dec. 2018

CONTENTS

Surveys

- | | | |
|----|---|------------------------|
| 1 | State-of-the-art and Development Trend of Artificial Intelligence Combined with Law | HUANG Qiao-juan et al. |
| 12 | Survey of Data Storage and Query Techniques in Blockchain Systems | WANG Qian-ge et al. |
| 19 | Survey of DTN Architecture and Key Technologies | HUANG Xing-he et al. |
| 24 | Research on Network Asset Detection Technology | WANG Chen-dong et al. |
| 32 | Security for Communication Protocols in Internet of Things; A Survey | YANG Wei et al. |
| 42 | Review of Dynamic Gesture Recognition Based on Depth Information | CHEN Tian-tian et al. |
| 52 | Survey of Tire Pattern Image Retrieval Techniques | LIU Ying et al. |

Network & Communication

- | | | |
|----|--|----------------------|
| 61 | Opportunistic Network Forwarding Algorithm Based on Node Cosine Similarity | ZHU Kun et al. |
| 66 | Virtual Network Mapping Algorithm Based on Cellular Genetic Mechanism | WANG Ming et al. |
| 71 | Study on Local World Evolution Model of Weighted Complex Supply Chain Network Based on Location Attraction | ZHAO Zhi-gang et al. |
| 77 | Study on Monte Carlo Location Algorithm in Wireless Sensor Networks | ZHANG Qi-man et al. |
| 81 | Prefix-based Anycast Routing Protocol for Wireless Sensor Networks | GU Yun-li et al. |
| 86 | Swarm Intelligence Algorithm for Prolonging Target Coverage Network Lifetime | FAN Xing-gang et al. |

Information Security

- | | | |
|-----|---|-----------------------|
| 92 | Integrity-verifying Single Keyword Search Method in Clouds | DAI Hua et al. |
| 98 | Self-adaption Adjustment Method for Experts in Risk Assessment | LENG Qiang et al. |
| 104 | Link Correlation Spoofing Attack and Detection Mechanism | XU Jia-jia et al. |
| 111 | Microblogging Malicious User Identification Based on Behavior Characteristic Analysis | XIA Chong-huan et al. |
| 117 | Semantic Roles Mining Algorithms Based on Formal Concept Analysis | ZHOU Chao et al. |
| 123 | DDoS Attack Detection System Based on Intelligent Bee Colony Algorithm | YU Xue-shan et al. |

Artificial Intelligence

- | | | |
|-----|--|-----------------------|
| 130 | Selective Expression Approach Based on Event Trigger for Event Coreference Resolution on Twitter | WEI Ping et al. |
| 137 | Learnt Clause Evaluation Algorithm of SAT Problem Based on Trend Strength | CHEN Qing-shan et al. |

- 142 Study on Recursive Auto-encoding Sentiment Classification Based on Topic Enhancement ZHU Yin et al.
- 148 Parallel Text Categorization of Random Forest PENG Zheng et al.
- 153 Multi-granularity Sentiment Classification Method Based on Sequential Three-way Decisions ZHANG Gang-qiang et al.
- 160 Dynamic Reliability Evaluation Method of Evidence Based on Intuitionistic Fuzzy Sets and Its Applications
WU Wen-hua et al.
- 166 Decision Making Approach Based on Evidential Reasoning Considering Semantic Relationship among
Assessment Grades ZHANG Mei-jing et al.
- 170 Physical Quantity Regression Method Based on Optimized BP Neural Network PAN Jun-hong et al.
- 177 Deep Learning Model for Typhon Grade Classification Based on Improved Activation Function ZHENG Zong-sheng et al.
- 182 Weighted Support Vector Machine Algorithm Based on Inner-correlations and Mutual Information of Features
PENG Xiao-bing et al.
- 187 Simulation and Optimization of Crowd Movement Behavior Based on Repast Symphony Platform LIU Wen-long et al.
- 192 Correlation-Hierarchy Based Virtual Maintenance Modeling Method for Complex Electromechanical
Components of Aircraft DONG Jian-kang et al.
- 196 Application of Improved UCT Algorithm in EinStein Würfelt Nicht! Computer Game ZHANG Xiao-chuan et al.
- 201 Repeatable Motion Planning of Redundant Manipulators Based on Terminal Neural Networks KONG Ying et al.

Graphics, Image & Pattern Recognition

- 206 Classification Algorithm for Texture Image Based on Local Characteristics of N-Fold Rotation Invariant Feature
HUANG Qing-yu et al.
- 210 Improved Image Reconstruction Algorithm Based on L1-Norm and TV Regularization XU Min-da et al.
- 217 Multi-focus Image Fusion Method Based on NSST and Adaptive PCNN YANG Li-su et al.
- 223 Hyperspectral Image Classification Based on Adaptive Active Learning and Joint Bilateral Filtering LI Chang-li et al.
- 229 Image Inpainting Based on Generative Adversarial Networks SUN Quan et al.
- 235 Surface Labeling Method Based on Feed-forward Context and Shape Priors GUO Yan-fei et al.
- 243 Hyperspectral Image Classification Based on Multi-scale Discriminative Spatial-spectral Features REN Shou-gang et al.
- 251 Hyperspectral Unmixing Algorithm Based on Dual Graph-regularized Semi-supervised NMF ZOU Li et al.
- 255 Classification of Tongue Image Based on Multi-task Deep Convolutional Neural Network TANG Yi-ping et al.
- 262 Visual Analysis Method of Garbage Disposal Modes Based on Self-organizing Maps Clustering QIN Xu-jia et al.

Interdiscipline & Frontier

- 268 City Functional Region Discovery Algorithm Based on Travel Pattern Subgraph XIAO Fei et al.
- 279 Study on Spatial Propagation Characteristics of Information Flow Based on Social Network Analysis Method
BI Shuo-ben et al.
- 288 Location Prediction Method Based on Similarity of Users Moving Behavior LI Sheng-zhi et al.
- 293 Cloud Storage System Based on Network Coding LIU Yan-tao et al.
- 299 Method of Similarity Join on Uncertain Graphs Using MapReduce MIAO Feng-yu et al.
- 308 De Novo Transcriptome Assembly Algorithm Based on RNA-Seq Datasets WU Si-wen et al.