

- ❖ 英国《科学文摘》(INSPEC) 来源期刊
- ❖ 俄罗斯《文摘杂志》(AJ) 来源期刊
- ❖ 美国《乌利希期刊指南(网络版)》(Ulrichsweb) 收录期刊
- ❖ 2017—2019年中国国际影响力优秀学术期刊(自然科学与工程技术)
- ❖ 第二届国家期刊奖百种重点科技期刊
- ❖ 中国科技核心期刊 ❖ 全国中文核心期刊
- ❖ 中国科技论文统计源期刊
- ❖ 中国学术期刊综合评价数据库来源期刊
- ❖ RCCSE 核心学术期刊 ❖ 中国期刊方阵双效期刊
- ❖ 《日本科学技术振兴机构数据库》(JST) 来源期刊
- ❖ 美国《艾博思科学数据库》(EBSCO) 全文来源期刊
- ❖ 美国《剑桥科学文摘(自然科学)》(CSA (NS)) 核心期刊
- ❖ 波兰《哥白尼索引》(IC) 来源期刊
- ❖ 中国科学引文数据库(CSCD) 来源期刊
- ❖ 《中文科技期刊数据库》来源期刊
- ❖ 《中国期刊网》《中国学术期刊(光盘版)》来源期刊
- ❖ 中国精品科技期刊顶尖学术论文(F5000)项目来源期刊
- ❖ 《电子科技文献数据库》来源期刊
- ❖ 《中国工程技术电子信息网》来源期刊

**计算机应用研究**  
**Jisuanji Yingyong Yanjiu**  
**第39卷 第9期 2022年9月**  
**目 次**

综述评论

- |                       |                      |
|-----------------------|----------------------|
| 基于深度学习的视频行为识别技术综述     | 李晨,何明,王勇,罗玲,韩伟(2561) |
| 重构图视角下超级账本在物联网的应用研究综述 | 冷泽琪,王坤昊,梁纬,郑月锋(2570) |
| 约束多目标进化算法研究进展         | 朱亚文,周红标,李杨,徐浩渊(2582) |

区块链技术

- |                             |                           |
|-----------------------------|---------------------------|
| RB-Raft:一种抗拜占庭节点的 Raft 共识算法 | 李淑芝,邹懿杰,邓小鸿,罗志琼,刘惠文(2591) |
| 无线物联网中局部有向无环图区块链研究          | 杨昌霖,王继光,汪清(2597)          |

算法研究探讨

- |                            |                             |
|----------------------------|-----------------------------|
| 基于句法分析及主题分布的关键词抽取模型        | 王昊,刘丹,刘硕(2603)              |
| 基于随机投影与集成学习的离群点检测算法        | 郭一阳,于炯,杜旭升,曹铭(2608)         |
| 基于用户潜在兴趣的知识感知传播推荐算法        | 张波,赵鹏,张金金,曾昭菊,肖栩豪(2615)     |
| 融合文本图卷积和集成学习的文本分类方法        | 周玄郎,邱卫根,张立臣(2621)           |
| 基于离散泊松混合模型的教学评价数据建模        | 黄浩,颜钱,甘庭,李石君(2626)          |
| 融入教育心理学的 SBO 算法            | 张雨婷,刘勇(2631)                |
| 计及负荷不确定性的强化学习实时定价策略        | 王菁祺,高岩,吴志强,李仁杰(2640)        |
| 融合服务聚类与协作相似度的服务替换方法        | 田雨晴,彭菲,王华东,胡强(2647)         |
| 考虑电池包数量的自动化集装箱码头多 AGV 调度优化 | 许彭锦,梁承姬(2653)               |
| 基于深度强化学习的生鲜产品联合库存控制与动态定价研究 | 毕文杰,周玉冰(2660)               |
| 基于模仿学习的机场停机位再分配决策算法        | 邢志伟,张前前,罗谦,陈肇欣(2665)        |
| 基于改进遗传算法的 SDN 多控制器负载均衡机制研究 | 徐爱鑫,孙士民,汪晓凡,徐国威,王美玉(2671)   |
| 面向实时事件流的复杂事件处理方法           | 邱涛,谢沛良,邓国鹏,郗红梅,郑智,夏秀峰(2677) |
| 基于多种群的随机扰动蚁群算法求解分布式约束优化问题  | 石美凤,肖诗川,冯欣(2683)            |
| 融合命题逻辑与神经网络的隐式深度协同推荐模型     | 陈邦,吴茂念,朱绍军,郑博,彭蔚(2689)      |
| 基于注意力网络的情感分析中的对比句处理        | 张蓉,刘渊,李阳(2695)              |

拉丁超立方抽样的自适应高斯小孔成像蝴蝶优化算法	徐杰,鲁海燕,赵金金,侯新宇,卢梦蝶(2701)
无迹西格玛点引导的拟反向黏菌算法及其工程应用	刘宇淞,刘升(2709)
基于圈结构的 LPANNI 优化算法	刘继,贾芳弟(2717)
基于局部图结构的链接预测模型	赵思云,黄增峰(2723)
基于意图的物联网服务描述与发现	刘星宇,江凌云(2731)
基于 DQN 的无人驾驶任务卸载策略	王锦,张新有(2738)
基于时空信息和任务流行度分析的移动群智感知任务推荐	杨桂松,王静茹,李俊,何杏宇(2745)
基于深度强化学习的随机资源受限多项目动态调度策略	郭晓剑,胡方勇(2752)

#### 系统应用开发

基于动态事件触发机制的网络化系统有限频域故障检测	朱淇,姜顺,潘丰(2757)
Android 应用程序中代码异味共存现象的实证研究	边奕心,王露颖,赵松,朱晓(2763)
基于 FDS 和元胞自动机动态耦合的火灾疏散模型	李超,李宇飞,霍非舟,张钦钦(2768)
基于分解集成的航空货运需求区间预测研究	李智,白军成(2773)
一种基于改进分层置信规则库的社交账户可信度评估方法	吴菲,王维(2779)

#### 网络与通信技术

基于网络终端支持的 NDN 移动性管理机制	李卓,毛亚春,罗蓬,马天祥,赵建利(2785)
多基站下基于 DRL 的 RAN 切片资源分配	马英洪,江凌云(2791)
基于最低度偏置重启随机游走的链路预测方法	李巧丽,韩华(2799)
基于 NOMA 异构云无线接入网的联合子信道和功率分配算法	顾兆伟,江凌云(2804)
基于布尔函数的网络可达性验证方法	张立群,林海涛,沈钊(2812)

#### 信息安全技术

基于国密算法 SM2、SM3、SM4 的高速混合加密系统硬件设计	李建立,莫燕南,粟涛,陈弟虎(2818)
基于超奇异同源的零知识证明及群签名方案	赵兴波,李梦东,王颖,朱屹霖(2826)
SDN 中基于 MS-KNN 算法的 LFA 检测方法	孙文悦,王昌达(2832)
高效的可撤销 SM9 标识签名算法	张博鑫,耿生玲,秦宝东(2837)
格上的简短可链接环签名	王杰昌,张平,李杰,常琳林,段莹(2843)

#### 图形图像技术

融合深层差异特征的 RGB-T 巢式语义分割网络	袁浩宾,赵涛,钟羽中(2850)
基于通道权重的顺序精炼 RGB-D 显著检测网络	卞华军,王华军,赵赫威(2854)
面向无监督分割的双分支上采样域自适应网络	韩宗桓,刘名果,李坤,陈立家,田敏,兰天翔,梁倩(2861)
基于条件生成对抗网络的梯级表面高光去除方法	胡宇航,胡海洋,李忠金(2867)
联合边路和中路解码特征学习的多描述编码图像增强方法	赵利军,曹聪颖,张晋京,白慧慧,赵耀,王安红(2873)

#### 信息集萃

下期要目	(2798)
------	--------

期刊基本参数:CN51-1196/TP \* 1984 \* m \* A4 \* 320 \* zh \* P \* ¥ 50.00 \* 3840 \* 49 \* 2022-09 \* n

本期责任编辑 黄莉,何俐

# Application Research of Computers

## Vol. 39 No. 9 Sep. 2022

### Contents

#### Survey

Review of video action recognition technology based on deep learning .....	Li Chen, He Ming, Wang Yong, et al. (2561)
Survey on application of Hyperledger in IoT from perspective of reconstructing diagrams .....	Leng Zeqi, Wang Kunhao, Liang Wei, et al. (2570)
Research progress of constrained multi-objective evolutionary algorithms .....	Zhu Yawen, Zhou Hongbiao, Li Yang, et al. (2582)

#### Technology of Blockchain

RB-Raft: Raft consensus algorithm for anti-Byzantine nodes .....	Li Shuzhi, Zou Yijie, Deng Xiaohong, et al. (2591)
Local directed acyclic graph blockchain in wireless Internet of Things .....	Yang Changlin, Wang Jiguang, Wang Qing (2597)

#### Algorithm Research & Explore

Keyword extraction model based on syntactic analysis and topic distribution .....	Wang Hao, Liu Dan, Liu Shuo (2603)
Outlier detection algorithm based on random projection and ensemble learning .....	Guo Yiyang, Yu Jiong, Du Xusheng, et al. (2608)
Knowledge-aware propagation recommendation algorithm based on user's potential interest .....	Zhang Bo, Zhao Peng, Zhang Jinjin, et al. (2615)
Text classification combining text graph convolution and ensemble learning .....	Zhou Xuanlang, Qiu Weigen, Zhang Lichen (2621)
Teaching evaluation data modeling based on discrete Poisson mixture model .....	Huang Hao, Yan Qian, Gan Ting, et al. (2626)
SBO algorithm integrated into educational psychology .....	Zhang Yuting, Liu Yong (2631)
Real-time pricing strategy based on reinforcement learning with load uncertainty .....	Wang Jingqi, Gao Yan, Wu Zhiqiang, et al. (2640)
Service substitution method combining service clustering and collaboration similarity .....	Tian Yuqing, Peng Fei, Wang Huadong, et al. (2647)
Research on multi-AGV scheduling optimization of automated container terminal considering number of battery packs .....	Xu Pengjin, Liang Chengji (2653)
Research on inventory control and dynamic pricing of fresh produce based on deep reinforcement learning .....	Bi Wenjie, Zhou Yubing (2660)
Decision-making algorithm for airport gate reassignment based on imitation learning .....	Xing Zhiwei, Zhang Qianqian, Luo Qian, et al. (2665)
SDN multi-controller load balancing mechanism based on improved genetic algorithm .....	Xu Aixin, Sun Shimin, Wang Xiaofan, et al. (2671)
Complex event processing method over real-time event streams .....	Qiu Tao, Xie Peiliang, Deng Guopeng, et al. (2677)
Random disturbance based multi-population ant colony algorithm to solve distributed constraint optimization problems .....	..... Shi Meifeng, Xiao Shichuan, Feng Xin (2683)
Implicit deep collaborative recommendation model based on propositional logic and neural network .....	Chen Bang, Wu Maonian, Zhu Shaojun, et al. (2689)
Handling contrastive sentences in sentiment analysis based on attention network .....	Zhang Rong, Liu Yuan, Li Yang (2695)
Self-adaptive Gaussian keyhole imaging butterfly optimization algorithm based on Latin hypercube sampling .....	..... Xu Jie, Lu Haiyan, Zhao Jinjin, et al. (2701)
Unscented sigma point guided quasi-opposite slime mould algorithm and its application in engineering problem .....	Liu Yusong, Liu Sheng (2709)
LPANNI optimization algorithm based on cycle structure .....	Liu Ji, Jia Fangdi (2717)

Link prediction method based on local topological structure .....	Zhao Siyun, Huang Zengfeng(2723)
Intent-based IoT service description and discovery .....	Liu Xingyu, Jiang Lingyun(2731)
DQN-based driverless task offloading policy .....	Wang Jin, Zhang Xinyou(2738)
Task recommendation based on spatial-temporal information and task popularity analysis in mobile crowd sensing .....	Yang Guisong, Wang Jingru, Li Jun, et al. (2745)
Stochastic resource-constrained multi-project dynamic scheduling strategy based on deep reinforcement learning .....	Guo Xiaojian, Hu Fangyong(2752)

### **System Development & Application**

Dynamic event-triggered fault detection for networked systems in finite-frequency domain .....	Zhu Qi, Jiang Shun, Pan Feng(2757)
Empirical study on code smell co-occurrences in Android applications .....	Bian Yixin, Wang Luying, Zhao Song, et al. (2763)
Fire evacuation model based on dynamic coupling of FDS and cellular automata .....	Li Chao, Li Yufei, Huo Feizhou, et al. (2768)
Research on interval prediction of air cargo demand based on decomposition integration .....	Li Zhi, Bai Juncheng(2773)
Credibility evaluation method for social accounts via improved hierarchical belief rule base .....	Wu Fei, Wang Wei(2779)

### **Technology of Network & Communication**

Mobility management mechanism based on network terminal supporting in named data networking .....	Li Zhuo, Mao Yachun, Luo Peng, et al. (2785)
RAN slice resource allocation based on DRL in multi base stations .....	Ma Yinghong, Jiang Lingyun(2791)
Link prediction algorithm based on lowest-degree preference random walk with restart .....	Li Qiaoli, Han Hua(2799)
Joint sub-channel and power allocation algorithm for downlink NOMA heterogeneous cloud RAN .....	Gu Zhaowei, Jiang Lingyun(2804)
Network reachability verification method based on Boolean functions .....	Zhang Liqun, Lin Haitao, Shen Zhao(2812)

### **Technology of Information Security**

Hardware design of high-speed hybrid encryption system based on SM2, SM3 and SM4 algorithm .....	Li Jianli, Mo Yannan, Su Tao, et al. (2818)
Zero-knowledge proof and group signatures based on supersingular isogeny .....	Zhao Xingbo, Li Mengdong, Wang Ying, et al. (2826)
LFA detection method based on MS-KNN algorithm in SDN .....	Sun Wenyue, Wang Changda(2832)
Efficient revocable SM9 identity-based signature algorithm .....	Zhang Boxin, Geng Shengling, Qin Baodong(2837)
Lattice-based short linkable ring signatures .....	Wang Jiechang, Zhang Ping, Li Jie, et al. (2843)

### **Technology of Graphic & Image**

Nested semantic segmentation network fusing deep difference features .....	Yuan Haobin, Zhao Tao, Zhong Yuzhong(2850)
Sequential refined RGB-D saliency detection network based on channel weight .....	Bian Huajun, Wang Huajun, Zhao Hewei(2854)
Double branch upsampling domain adaptive network for unsupervised segmentation .....	Han Zonghuan, Liu Mingguo, Li Shen, et al. (2861)
Conditional generative adversarial network-based method for stepped surface highlight removal .....	Hu Yuhang, Hu Haiyang, Li Zhongjin(2867)
Multiple description coded image enhancement method with joint learning of side-decoding and central-decoding features .....	Zhao Lijun, Cao Congying, Zhang Jinjing, et al. (2873)