

JOURNAL OF COMPUTERS

ISSN: 1991-1599 Volume 31 Number 4 August 2020

CONTENTS

An Image Classification Method for Digital Breast Tomosynthesis Based on Combined Texture Feature Extraction	1
<i>You-Ming Wang, Jia-Qi Miao, Han-Mei Zhang</i>	
A Virtual-real Fusion method of an Augmented Reality Map Based on a Hierarchical Semantic Marker	14
<i>Zhangang Wang, Xian Zhu</i>	
A Novel Hyper-Heuristic with Decomposition and Mathematical Programming	28
<i>Zongzheng Chi, Xiaochen Lai, Shuwei Zhang, He Guo, Zhilei Ren</i>	
Anomaly Detection in Climate Data using Stacked and Densely Connected Long Short-Term Memory Model	42
<i>Teguh Wahyono, Yaya Heryadi, Haryono Soeparno, Bahtiar Saleh Abbas</i>	
Recognizing Facial Emotions Using Pooling-first Bilinear CNN from a Single Image	54
<i>Hao Gong, Tianyou Pei, Qiaoyu Ma, Dongmei Jiang, Teng Yu</i>	
Research on Security of the Authorization Chain Smart Terminal Based on Polymorphic Key Exchange Protocol	65
<i>Yi-Feng Yin, Qing Zhang, Yong Gan, Ting-Jun Zhang</i>	
Multi-Update Patterns and Validity Verification for Robust Visual Tracking	77
<i>Jia Wen, Hong-Jun Wang, Yan-Nan Li, Ji-Wei Zhao, Yu-Ying Yang</i>	
Functional Module Mining in Uncertain PPI Network Based on Fuzzy Spectral Clustering	91
<i>Yi-min Mao, Yin-ping Liu</i>	
Super-Resolution Algorithm for Deep Undercooling Melt Image Based on Adaptive Mixed Sample	107
<i>Yuehai Wang, Ze Su, Shiming Cui, Yuying Ma, Yang Yang</i>	
A Retrieval Algorithm of Encrypted Speech Based on Biological Hashing	126
<i>Qiu-Yu Zhang, Gai-Li Li, Si-Bin Qiao</i>	

An Improved Multi-objective Shark Smell Optimization Algorithm for Automatic Train Operation Based on Angle Cosine and Fusion Distance	141
<i>Long-Da Wang, Xing-Cheng Wang, Kai-Wei Liu</i>	
Research-based- Named entity Recognition Learning Text Biomedical Extraction by Adoption of Training Bidirectional language model (BiLM)	157
<i>Alshreef Abed, Yuan Jingling, Lin Li</i>	
Spatial Feature Extraction for Hyperspectral Image Classification Based on Multi-scale CNN	174
<i>Haifeng Song, Weiwei Yang</i>	
A Multi-hop Localization Through Model Selection for Irregular Networks	187
<i>Ru-Lin Dou, Xu-Ming Fang, Ya-Nan Liu, Xiao-Hui Mo</i>	
Self-learning Consensus Voting Strategy and Its Application Based on Multiple Classification Algorithms	198
<i>Yi-Qin Bao, Qiang Zhao, Zhong-Xue Yang, Hao Zheng, Yin-tong Wang</i>	
Improved Pedestrian Detection Algorithm Based on HOG and SVM	211
<i>Renwei Tu, Zhongjie Zhu, Yongqiang Bai</i>	
A Frequency Synthesizer with Low Phase Noise in UHF RFID Reader Based on Sigma-Delta Modulation Fractional Frequency Phase-Locked Loop	222
<i>Gang Chen</i>	
A Novel Color Image Encryption Algorithm Based on Logistic-Sine System and Hyper-Chaotic Lorenz System	234
<i>Dong Li</i>	
Dynamic Spectrum Access Technology Based on Fuzzy Clustering Algorithm	246
<i>Zhijun Teng, Lixin Teng, Fujuan Qu, Luying Xie</i>	
Design and Implementation of Mobile Laser Engraving Machine	259
<i>Daixuan Liu, Bingxia Shen</i>	
A Novel Method for the Time Series Data Processing and Analysis of Social Networks	273
<i>Guixun Luo, Zhiyuan Zhang, Zemin Bao, Naiyue Chen</i>	
Application Research of Chaotic Binary Particle Swarm Optimization Algorithm in Dynamic Spectrum Allocation	288
<i>Zhi-Jun Teng, Lu-Ying Xie, Hao-Lei Chen, Hua Zhang</i>	