

Contents

Algorithms and Complexity

Multi-resource Fair Allocation with Bounded Number of Tasks in Cloud Computing Systems	3
<i>Weidong Li, Xi Liu, Xiaolu Zhang, and Xuejie Zhang</i>	
Learning Latent Topics from the Word Co-occurrence Network	18
<i>Wu Wang, Houquan Zhou, Kun He, and John E. Hopcroft</i>	
Fusion of Global and Local Deep Representation for Effective Object Retrieval	31
<i>Mao Wang, Yuewei Ming, Qiang Liu, and Jianping Yin</i>	
ETSW: An Encounter History Tree Based Routing Protocol in Opportunistic Networks	46
<i>Haoyan Liang, Zhigang Chen, Jia Wu, and Peiyuan Guan</i>	
DFP: A Data Fragment Protection Scheme for mHealth in Wireless Network	60
<i>Lin Zhang, Zhigang Chen, and Deyu Zhang</i>	
A Greedy Heuristic Based on Corner Occupying Action for the 2D Circular Bin Packing Problem.	75
<i>Kun He and Mohammed Dosh</i>	
Efficient Forwarding Strategy for Opportunistic Network Based on Node Similarity	86
<i>Yucheng Lin, Zhigang Chen, and Jia Wu</i>	
Transmission Failure Tolerance and Node Punishment Mechanism in Opportunistic Network Based on Repeated-Game	101
<i>Bin-an Yin, Zhigang Chen, and Jia Wu</i>	

Software Theory and Method

Formal Analysis and Verification for an Ultralightweight Authentication Protocol RAPP of RFID	119
<i>Wei Li, Meihua Xiao, Yanan Li, Yingtian Mei, Xiaomei Zhong, and Jimin Tu</i>	

Double-Spending Detection for Fast Bitcoin Payment Based
on Artificial Immune 133
*Zhengjun Liu, Hui Zhao, Wen Chen, Xiaochun Cao, Haipeng Peng,
Jin Yang, Tao Yang, and Ping Lin*

Research on Information Organizations and Intelligent Retrievals
for Digital Library Based on Ontology and Semantic Web 144
Guangjun Guo, Zhigang Chen, Dong Xie, and Mei Li

Data Science and Machine Learning Theory

Deep Compression on Convolutional Neural Network for Artistic
Style Transfer 157
Jian Hu, Kun He, John E. Hopcroft, and Yaren Zhang

Degree Correlations in Two Layer Growth Model with Nonlinear
Preferential Attachment Rule 167
Youjun Lu, Daoyun Xu, and Jincheng Zhou

Improving Accuracy of Sybil Account Detection in OSNs
by Leveraging Victim Prediction 182
Qingqing Zhou, Zhigang Chen, and Rui Huang

Landmark-Based Spectral Clustering with Local Similarity Representation . . . 198
Wanpeng Yin, En Zhu, Xinzhong Zhu, and Jianping Yin

Query Optimization Strategies in Probabilistic Relational Databases 208
Caicai Zhang, Zhongsheng Cao, and Hong Zhu

Recommendation Method of Ore Blending Based
on Thermodynamic Principle and Adaptive Step Size 221
*Huan Wang, Bingyang Shen, Yuxing Gao, Yuning Cao,
and Xiaojuan Ban*

A Survey of Personalised Image Retrieval and Recommendation 233
*Zhenyan Ji, Weina Yao, Huaiyu Pi, Wei Lu, Jing He,
and Haishuai Wang*

A Fast Interactive Item-Based Collaborative Filtering Algorithm 248
Zhenyan Ji, Zhi Zhang, Canzhen zhou, and Haishuai Wang

Parallel and Distributed Computing

The Impact of the Mesh Partitioning Factors on CFD Simulation 261
*Chen Cui, Juan Chen, Feihao Wu, Miao Wang, Yuyang Sun,
and Xinhai Xu*

Bat Algorithm Based Low Power Mapping Methods for 3D Network-on-Chips.	277
<i>Jiazheng Li, Guozhi Song, Yue Ma, Cheng Wang, Baohui Zhu, Yan Chai, and Jieqi Rong</i>	
A Hybrid Adaptive Dissemination Solution Based on Geographic Distance for Vehicular Ad Hoc Networks.	296
<i>Qi Fu, Anhua Chen, Yunxia Jiang, Zhigang Chen, and Yankai Song</i>	
Computational Model	
Near Optimal Online Resource Allocation Scheme for Energy Harvesting Cloud Radio Access Network with Battery Imperfections.	313
<i>Sijing Duan, Zhigang Chen, and Deyu Zhang</i>	
Singular Point Probability Improve LSTM Network Performance for Long-term Traffic Flow Prediction	328
<i>Boyi Liu, Jieren Cheng, Kuanqi Cai, Pengchao Shi, and Xiangyan Tang</i>	
A Bi-directional Evolution Algorithm for Financial Recommendation Model	341
<i>Jingming Xue, Lu Huang, Qiang Liu, and Jianping Yin</i>	
Author Index	355

Theoretical Computer Science

35th National Conference, NCTCS 2017, Wuhan, China,

October 14-15, 2017, Proceedings

Du, D.; Lian, L.; En, Z.; He, K. (Eds.)

2017, XXI, 356 p. 165 illus., Softcover

ISBN: 978-981-10-6892-8