2018 IEEE 16th International Conference on Software Engineering Research, **Management and Applications** (SERA 2018)

Kunming, China 13-15 June 2018



IEEE Catalog Number: CFP18386-POD ISBN:

978-1-5386-5887-1

Copyright \odot 2018 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP18386-POD

 ISBN (Print-On-Demand):
 978-1-5386-5887-1

 ISBN (Online):
 978-1-5386-5886-4

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400 Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



Table of Contents

Keynote	
ing and Matching Time Series and State Sequences on Ma	
Quantitative Modeling and Analytical Calculation of Elasticity in Cloud Computing Keqin Li	. 3
Concept Location and its Applications in Software Evolution Simon Xu	
Analysis and Design of Algorithms / Program	7
Solar Power and Electricity Market in Saudi Arabia Fathe Jeribi, Sungchul Hong	7
An Overview of Event Based Directional Change for Algorithmic Trading Botao Ye, Dejun Xie	. 13
Improvement of TF-IDF Algorithm Based on Knowledge Graph Yanpeng Wang, Dehai Zhang, Ye Yuan, Qing Liu, Yun Yang	. 19
Reliability Modeling and Analysis	25
An Information-flow-based sensitivity analysis method for continuous-time models Yimin Yin, Xiaojun Duan	. 25
Data Mining and Knowledge Recoveryware Architecture	31
Enhanced Sentiment Classification for Informal Myanmar Text of Restaurant Reviews Yu Mon Aye, Sint Sint Aung	31
Motion Deblurring Via Using Generative Adversarial Networks For Space-Based Imaging Yi Chen, Fengge Wu, Junsuo Zhao	37
A Research and Strategy of Objection Detection on Remote Sensing Image Yannei Fu, Fengge Wu, Junsuo Zhao	. 42
Semi-supervised Classification with Adaptive High-Order Graph Embedding Zhili Ye, Fengge Wu	48
Transfer Learning with Ensemble of Multiple Feature Representations Hang Zhao, Qing Liu, Yun Yang	54
Tourist Gender Differences through Lens of Social Sensing Jun Wang, BaoGuo Yu, Yunpeng Li	. 62
Global Shuffle Grouping (GSG): a Load Balancing Strategy for Continuous Range Queries on Storm Yuqi Zhang, Botao Wang, Jianpeng Zhou, Hanhui Zhong, Xiao Tian	. 71
Least-Squares Support Vector Machine for Semi-Supervised Multi-Tasking Xuekuo Jia, Shipu Wang, Yun Yang	. 79
Time Series Clustering via NMF in Networks Guowang Du, Lihua Zhou, Yuan Fang, Ming Yang	. 87
Network Traffic Anomaly Detection Based on Wavelet Analysis Zhen Du, Lipeng Ma, Huakang Li, Qun Li, Guozi Sun, Zichang Liu	
Stance Mining for Online Debate Posts Using Part-of-Speech (POS) Tags Frequency Thiri Kyaw, Sint Sint Aung	

Lejun Gong, Daoyu Huang, Shixing Sun, Zhihong Gao, Chuandi Pan, Ronggen Yang, Yongmin Li, Geng Yang 108

Extraction of Interactions of Genes2Genes Related to Breast Cancer

Brain Tumor Segmention based on Dilated Convolution Refine Networks Di Liu, Hao Zhang, Mingming Zhao, Xiaojuan Yu, Shaowen Yao, Wei Zhou
The Advance of Support Tensor Machine
Yi Xiang, Jing He, LiWen Wu, Qian Jiang, Xin Jin, Shaowen Yao
The Research of Multi-label k-Nearest Neighbor Based on Descending Dimension
Song Gao, Xiaodan Yang, Lihua Zhou, Shaowen Yao
Software Engineering 136
A General Framework and Maturity Model for Bioinformatics Pipeline Development Ethan W. Chen
Software Project Estimation Using Improved Use Case Point
Sima Bagheri, Alireza Shameli-Sendi
Feature Model Synthesis From Language-Independent Functional Descriptions
Mariem Mefteh, Nadia Bouassida, Hanene Ben-Abdallah151
Bug Localization Approach using Source Code Structure with Different Structure Fields
Kyaw Ei Ei Swe, Hnin Min Oo
A Guide for Building the Knowledgebase for Software Entrepreneurs, Firms, and Professional Students
Laila Nushrat Raha, A K M Wasimul Hossain, Tahmid Faiyaz, Mahady Hasan, Nuzhat Nahar, M Rokonuzzaman 165
Design and Process Engineering 172
Mulesoft – Salesforce Integration Using Batch Processing
Manvi Seth 172
Market Analysis as a possible activity of Software Project Management
Sarah Tahsin, Abdul Munim, Mahady Hasan, Nuzhat Nahar, M Rokonuzzaman
Communication Systems and Networks 184
A Method of Channel Capacity Optimization Based on Dynamically Adjusted Inertia Weight Acceleration Factor in
Cognitive Sensing Network
Yanjun Hu, Dongdong Wei
Service differentiation strategy based on user demands for https web servers Lu Yan, Haojiang Deng, Xiao Chen, Xiaozhou Ye
Hybrid Intrusion Detection System using K-means and Classification and Regression Trees Algorithms
Yi Yi Aung, Myat Myat Min
Software Architecture 200
The Research of a Lightweight Distributed Crawling System
Feng Ye, Zongfei Jing, Qian Huang, Yong Chen
Healthcare Information Engineering 205
Design and Implementation of High Concurrent Communication Server in Health Monitoring System
Junhuai Li, Yue Li, Jingfei Fu, Huaijun Wang, Lei Yu
Parallel and Distributed Computing 211
Dynamic Performance Aware Reduce Task Scheduling in MapReduce on Virtualized Environment
Rathinaraja Jeyaraj, Ananthanarayana V S
Author Index 219