2019 15th International Conference on Semantics, Knowledge and **Grids (SKG 2019)**

Guangzhou, China 17 – 18 September 2019



IEEE Catalog Number: CFP1930A-POD **ISBN:**

978-1-7281-5824-2

Copyright \odot 2019 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:
 CFP1930A-POD

 ISBN (Print-On-Demand):
 978-1-7281-5824-2

 ISBN (Online):
 978-1-7281-5823-5

ISSN: 2325-0623

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



2019 15th International Conference on Semantics, Knowledge and Grids (SKG) SKG 2019

Table of Contents

SKG 2019 Preface ix SKG 2019 Organizing Committee x
SKG 2019 Program Committee xi
Technical Papers
Knowledge Recommendation Based on Item Response Theory .1 Jiansheng Fang (CVTE Research, China), Qingshun Guo (Sun-yat Sen University, China), Huiyou Chang (Sun-yat Sen University, China), Ming Yang (CVTE Research, China), Wei Zhao (CVTE Research, China), and Yan Qin (China Telecom Corporation Limited Guangdong Branch, China)
Automatic Wrong Option Generation Based on Confusion Degree <u>.</u> 8
Utilize Discourse Relations to Segment Document for Effective Summarization .1.2
Recommendation of Research Collaborator Based on Semantic Link Network .1.6 Jian Zhou (Institute of Computing Technology, CAS, China) and Muhammad Adnan Rafi (Aston University, UK)
A Survey of Probabilistic Resource Space Model .21
The Link between Collaboration and Citation .26. Zishuo Huang (Guangzhou University, China)
Sentiment Analysis Based on Bi-LSTM Using Tone .3.0

JEDoDF: Judicial Event Discrimination Based on Deep Forest .3.6
KB-Transformer: Incorporating Knowledge into End-to-End Task-Oriented Dialog Systems .44 Haihong E (Beijing University of Posts and Telecommunications, China), Wenjing Zhang (Beijing University of Posts and Telecommunications, China), and Meina Song (Beijing University of Posts and Telecommunications, China)
Learning Tibetan-Chinese Cross-Lingual Word Embeddings .49. Wei Ma (Northwest Minzu University, China), Hongzhi Yu (Northwest Minzu University, China), Kun Zhao (Northwest Minzu University, China), and Deshun Zhao (Northwest Minzu University, China)
Applications of Deep Learning Using Quaternary Hash Codes for Image Retrieval .54
A Mission-Oriented Dynamic Distribution Method of Battlefield Situation Information with Knowledge-Based Feedback Mechanism .60
Top-k Nearest Keyword Search in Public Transportation Networks .6.7
GRASP-Based Approach for Minimum Initial Marking Estimation in Labeled Petri Nets .7.5
Efforts towards Combining Graphics, Uncertainty, and Semantics: A Survey .81
Automatic Generation of Survey Paper Based on Template Tree .89
Discovering Classification Dimensions for Managing Scientific Resources .9.7

Bei Xu (Nanjing University of Posts and Telecommunications, China) and Wei Hao (Nanjing University of Posts and Telecommunications, China)
Automatic Evaluation of Text Summarization Based on Semantic Link Network .1.0.7
An Efficient Residual-Convolutional Neural Model for Handwritten Text Recognition .1.15 Yanan Feng (Nanjing University of Posts and Telecommunications, China) and Xuezhong Xiao (Nanjing University of Posts and Telecommunications, China)
Group-Intelligence Construction of Linguistic-Humanity KG in Chinese Verses .1.19
News Image Captioning Based on Text Summarization Using Image as Query .1.23
Minimizing Vehicle Re-Identification Dataset Bias Using Effective Data Augmentation Method.127 Zakria Jamali (University of Electronic Science and Technology of China), Jianhua Deng (University of Electronic Science and Technology of China), Jingye Cai (University of Electronic Science and Technology of China), Muhammad Umar Aftab (University of Electronic Science and Technology of China), and Kashif Hussain (University of Electronic Science and Technology of China)
An Efficient Algorithm for Link Prediction Based on Local Information: Considering the Effect of Node Degree .1.3.1
IPSO: Improved Particle Swarm Optimization Based Task Scheduling at the Cloud Data Center 239 Zhiyong Luo (Chongqing University of Post and Telecommunications, China), Qinghuang Deng (Chongqing University of Post and Telecommunications Chongqing, China), Guoxi Ma (Chongqing University of Post and Telecommunications Chongqing, China), Leng Han (Chongqing University of Post and Telecommunications Chongqing, China), and Hongtao Liu (Chongqing University of Post and Telecommunications Chongqing, China)

Expansion of Sentiment Lexicon Based on Label Propagation .1.45 HongTao Liu (Chong Qing University of Posts and Telecommunications, China), JinChi Zhu (Chong Qing University of Posts and Telecommunications, China), XueYan Liu (Chong Qing University of Posts and Telecommunications, China), GeGe Li (Chong Qing University of Posts and Telecommunications, China), QiMin Qian (Chong Qing University of Posts and Telecommunications, China), Ning Su (Chong Qing University of Posts and Telecommunications, China), and Ning Wang (Chong Qing University of Posts and Telecommunications, China)
Translation Validation of Code Generation from the SIGNAL Data-Flow Language to Verilog .1.53 Hafiz Muhammad Amjad (Beihang University, China), Kai Hu (Beihang University, China), Jianwei Niu (Beihang University, China), Noor Khan (Beihang University, China), Loïc Besnard (IRISA/CNRS, France), and Jean-Pierre Talpin (INRIA, France)
The B5-Modalized Propositional Logic .1.6.1
Negative Authorization by Implementing Negative Attributes in Attribute-Based Access Control Model for Internet of Medical Things .1.6.7
A Meta-Database System Approach for Business Data Sharing among Multiple Target Databases
175 Zhe Huang (Southern University of Science and Technology, China), Jiaxing Li (Southern University of Science and Technology, China), and Jingde Cheng (Southern University of Science and Technology, China)
Discovering Political Polarization on Social Media: A Case Study .1.82
Key Concepts of Group Pattern Discovery Algorithms from Spatio-Temporal Trajectories .1.9.0. Karolina Dluzniak (University of West London, UK), Wei Jie (University of West London, UK), Hai Wang (Aston University, UK), and Wei Xing (Xi'an University of Posts and Telecommunications, China)
Author Index 199