2022 European Conference on Natural Language Processing and Information Retrieval (ECNLPIR 2022)

Hangzhou, China
18 – 20 November 2022

IEEE Catalog Number: CFP22CW8-POD
ISBN: 978-1-6654-7383-5

Copyright © 2022 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: CFP22CW8-POD
ISBN (Print-On-Demand): 978-1-6654-7383-5
ISBN (Online): 978-1-6654-7382-8

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

2022 European Conference on Natural Language Processing and Information Retrieval (ECNLPIR)

ECNLPIR 2022

Table of Contents

Message from the General Chair ..... **viii**
Message from the Program Chair ..... **ix**
Organizing Committee ..... **x**
Steering Committee ..... **xi**
Program Committee ..... **xii**
Reviewers ..... **xiii**
Sponsors ..... **xiv**

2022 European Conference on Natural Language Processing and Information Retrieval (ECNLPIR)

Sports Training Decision Support System and Realization Based on Data Mining and BP Neural Network 1
Lin Song (Jiangxi Science and Technology Normal University, China)

Internet Data Risk Model of Sports Events Based on Convolutional Neural Network 5
Lin Song (Jiangxi Science and Technology Normal University, China)

Machine Translation Technology Based on Natural Language Processing 10
Mo Qin (Jiangxi University of Applied Science, China)

Design of English Translation Intelligent Recognition System Based on Data Analysis Algorithm 14
Xuemei Zou (Nanchang Jiaotong Institute, China) and Ting Li (Nanchang Jiaotong Institute, China)

Keyword Extraction Based on Random Forest and XGBoost - An Example of Fraud Judgment Document 17
Tianchi Zhou (Ocean University of China, China), Hong Zhao (Ocean University of China, China), and Xuechen Zhang (Ocean University of China, China)

Research on Optimization of Scientific Research Management Information System in Colleges and Universities Based on Artificial Neural Network 23
Junqi Guo (Changchun University of Chinese Medicine) and Mo Qu (Changchun University of Chinese Medicine)

An Empirical Study on the Impact of Technological Innovation on Enterprise Performance Based on IT Value-Added Theory 28
Jingxue Yuan (Universiti Sains Malaysia, Malaysia), Aiping Teoh (Universiti Sains Malaysia, Malaysia), and Wanti Chen (Guangdong Shungao Investment and Financing Guarantee Co., Ltd , China)

Similarity Measures Based on Multi-knowledge Integration 36
Qi Kang (Liaocheng University), Yangli Jia (Liaocheng University), Zhenling Zhang (Liaocheng University), and Xiangliang Zhang (Liaocheng University)

A Bibliometric Analysis of Machine Translation Post-editing from 2012 to 2021 39
Yanqi Lu (Shanghai Sanda University)

A Hybrid Scheme for Parsing Cantonese Text Based on PyCantonese Plus and PyLTP 47
Chunxiao Huang (Yunnan University), Chunyu Li (Guangzhou University), Shaowen Yao (Yunnan University), Ye Ding (Dongguan University of Technology), Mingsuo Bao (Yunnan University), and Kun She (University of Electronic Sci&Tech of China)

An EEG-Based Analysis on the Hemisphere Activation during Literary Metaphor Comprehension . 52
Lina Sun (University of Jyvaskyla), Hongjun Chen (Dalian University of Technology), Chi Zhang (Dalian University of Technology), Qixuan Zhang (Dalian University of Technology), Timo Hamalainen (University of Jyvaskyla), and Fengyu Cong (Dalian University of Technology)

A Preliminary Study on Perceptual Boundary of Front Vowels in Guangzhou Cantonese: Discussion about Phonological Induction of [eu] & [iau] 57
Jiaying Liang (Jinan University, Guangzhou) and Xinzhong Liu (Jinan University, Guangzhou)

Long-tailed Multi-label Text Classification via Label Co-occurrence-Aware Knowledge Transfer 62
Kai Li (Beijing Jiaotong University) and Liping Jing (Beijing Jiaotong University)

Relational Graph Attention Network Based on Bi-Directional Attention Flow for Aspect-based Sentiment Analysis 69
Wenxia Gu (Xinjiang University, China), Wumaier Aishan (Xinjiang University, China), Weiwei Sun (Xinjiang University, China), and Qian Yang (Xinjiang University, China)

A Comparative Study of Filipino and Chinese Prosodies 78
Yali Liu (Jinan University, China), Yi Shao (Jinan University, China), and Nankai Wu (Jinan University, China)

Multilingual Document Concept Topic Modeling 84
Ibrahim Hussein Musa (School of computer Science and software engineering Southeast university China), Kang Xu (Nanjing University of Posts and Telecommunication Nanjing, China), and Ibrahim Zamit (University of Chinese Academy of Sciences Beijing, China Shenzhen Institute of Advanced Technology Chinese Academy of Sciences Shenzhen, China)

A Novel Explainable Structure for Text Classification 92
Lifeng Chen (Beijing Institute of Technology), Huaping Zhang (Beijing Institute of Technology), Yugang Li (Beijing Institute of Technology), and Shunping Wei (Minzu University of China)

Relation Between Textual Judou and Acoustic Pauses in Cantonese 96
Dechong Deng (Jinan University,Guangzhou, China) and Xingquan Hou (Jinan University,Guangzhou, China)

Media Representation of China in COVID-19 Reports: Text Mining of the Language of New York Times 101
Zhixia Yang (Shanghai Sanda University), Haiyan Men (Shanghai Sanda University), and Richard Ingham (University of Westminster)

A Named Entity Recognition Method for Tibetan based on SWF-Cascade-BiLSTM-CRF Mode 108
Zehui Xu (Tibet University, China), Jie Zhu (Tibet University, China), Chao Wang (Tibet University, China), Songsi Yan (Tibet University, China), Zezhou Xu (Tibet University, China), and Yashan Liu (Tibet University, China)

Author Index **113**