

2024 International Conference on Asian Language Processing (IALP 2024)

**Hohhot, China
4-6 August 2024**



**IEEE Catalog Number: CFP2444I-POD
ISBN: 979-8-3315-4086-9**

**Copyright © 2024 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:	CFP2444I-POD
ISBN (Print-On-Demand):	979-8-3315-4086-9
ISBN (Online):	979-8-3315-4085-2
ISSN:	2159-1962

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 Content

About the Conference	X
Message from the Conference Chairs	XII
Message from the Program Chairs	XIII
Conference Committees	XIV
Keynote Speeches	XVII
Author Index	XX
 Papers	
A1: Linguistic - I	
A1.1 On the Intergenerational Inheritance of Thai Chinese Literary Language Based on Style Calculation	
<i>Xinyue Zhang, Hua Liu</i>	<i>1</i>
A1.2 The Covariation and Cue Trading Relation between VOT and F0 in Mandarin	
<i>Chong Cao, Qian Li, Qing He</i>	<i>7</i>
A1.3 Exploring worldwide research trends on fake news through a bibliometric and visual analysis	
<i>Hong Wang, Yunfeng Ge</i>	<i>13</i>
A1.4 Screening for Alzheimer's Disease in Mainland China Based on Syntax Impairment	
<i>Yuwei Yang, Linlin Liang, Junhua Gan, Ying Shen, Zhiqiang Lu, Wen Shang, Wenmei Ji, Shiwei Cui, Gefei Feng, Yong Ma, Gangyi Feng, Zude Zhu</i>	<i>19</i>
A1.5 An Empirical Study of the Effect of "Saliency" and "Competition" on Zero Anaphora in L2 Chinese Spoken Language	
<i>Xiaomeng Tian, Yang Zhao</i>	<i>25</i>
A1.6 Resolving Chinese Anaphora with ChatGPT	
<i>Shuangshuang Chen</i>	<i>31</i>
B1: Natural Language Processing - I	
B1.1 A Flat-Span Contrastive Learning Method for Nested Named Entity Recognition	
<i>Yaodi Liu, Kun Zhang, Rong Tong, Chenxi Cai, Dianying Chen, Xiaohe Wu</i>	<i>37</i>
B1.2 Threshold Determination for Chinese Character Image Processing in Multimodal Information Fusion	
<i>Weigang Li, Rafael Marconi Ramos, Pedro Carvalho Brom</i>	<i>43</i>

B1.3 GC-PCWR+ for Word Sense Disambiguation <i>Xueting Huang, Jian Zhang, Yuanzhe Ma</i>	49
B1.4 Cross-Lingual Word Embedding Generation Based on Procrustes-Hungarian Linear Projection <i>Hao Xing, Nier Wu, Yatu Ji, Yang Liu, Na Liu, Min Lu</i>	55
B1.5 Cross-Lingual Word Alignment for ASEAN Languages with Contrastive Learning <i>Jingshen Zhang, Xinying Qiu, Teng Shen, Wenyu Wang, Kailin Zhang, Wenhe Feng</i>	61
B1.6 Research on Keyword-Based Element Extraction for Chinese Patent Retrieval <i>Zeyi Jin, Zhaoyong Yang, Gongbo Tang, Tingchao Liu, Endong Xun</i>	67
A2: Education - I	
A2.1 The Status Quo of English Study Engagement within Smart Classroom Environments and the Pathways of Enhancement <i>Zhenfeng He, Mingmei Gao, Jie Xu</i>	74
A2.2 Research on the Development and Pedagogical Application of a Learning Tool for Error-prone Chinese Characters <i>Yanshan He, Hongwu Yang, Di Zhang, Weitong Guo, Yun Wang, Xiaolong Bu</i>	79
A2.3 A Study on Tone Errors in Mandarin Spoken by Preschool Children in the Amdo Tibetan Area <i>Hongwen Xu, Hongwu Yang, Boyu Zhu, Weitong Guo, Xiaolong Bu, Yanshan He</i>	85
B2: Speech Processing - I	
B2.1 Advancing Airport Tower Command Recognition: Integrating Squeeze-and-Excitation and Broadcasted Residual Learning <i>Yuanxi Lin, Tonglin Zhou, Xiao Yang</i>	91
B2.2 Speech de-identification data augmentation leveraging large language model <i>Priyanshu Dhingra, Satyam Agrawal, Chandra Sekar Veerappan, Thi Nga Ho, Eng Siong Chng, Rong Tong</i>	97
B2.3 The Effects of Noise and Gender on Chinese - English Rhythms Produced by Native Chinese Speakers <i>Yimiao Gu, Jian Gong</i>	103
B2.4 Comparison of Chinese and English Rhythm Produced by Chinese Speakers in Quiet and Noise <i>Beibei Li, Jian Gong</i>	109

A3: Natural Language Processing - II

A3.1 Comparing Feature-based and Context-aware Approaches to PII Generalization Level Prediction

Kailin Zhang, Xinying Qiu 114

A3.2 Exploring Sensory Knowledge and Pre-training Language Models for Chinese Metaphor Detection

Qingqing Zhao, Xue Xiang, Zhongqing Wang 120

A3.3 FFN: a Fine-grained Chinese-English Financial Domain Parallel Corpus

Yuxin Fu, Shijing Si, Leyi Mai, Xi-ang Li 127

A3.4 Transferring Zero-shot Multilingual Chinese-Chinese Translation Model for Chinese Minority Language Translation

Ziyue Yan, Hongying Zan, Yifan Guo, Hongfei Xu 133

A3.5 Construction and Analysis of a Diachronic Knowledge Base of Traditional Values in Chinese Idioms

Hao Sun, Huidong Du, Yue Wang, Xupeng Liu, Dong Yu, Pengyuan Liu 139

B3: Large Language Model - I

B3.1 Chinese Generation and Security Index Evaluation Based on Large Language Model

Yu Zhang, Yongbing Gao, Weihao Li, Zirong Su, Lidong Yang 151

B3.2 Performance of Recent Large Language Models for a Low-Resourced Language

Ravindu Jayakody, Gihan Dias 162

B3.3 Enhanced Discriminative Fine-Tuning of Large Language Models for Chinese Text Classification

Jinwang Song, Hongying Zan, Kunli Zhang 168

B3.4 The implementation solution for automatic visualization of tabular data in relational databases based on large language models

Hao Yang, Zhaoyong Yang, Ruyang Zhao, Xiaoran Li, Gaoqi Rao 175

A4: Research on Minority Languages in Artificial Intelligence - I

A4.1 Constructing Knowledge Hypergraph of Liver Diseases based on Tibetan Medicinal Materials

Jianfu Chen, Jiuchang Pei, Yan Sun 181

A4.2 Constructing Tibetan Materia Medica Knowledge Graph from Ecological Census

Jiuchang Pei, Jianfu Chen, Yan Sun 188

A4.3 Review of Research on Mongolian Fixed Phrases Recognition <i>Xiaolong Sui, Zhonghao Zhang, Na Liu, Guiping Liu, Yatu Ji, Qing-Dao-Er-Ji Ren, Nier Wu, Min Lu</i>	192
A4.4 Research on Mongolian Speech Recognition Based on the Self-supervised Model <i>Hongyi Su, Yu Xue</i>	199
A4.5 Document-level Mongolian-Chinese Neural Machine Translation Incorporating Target-Side Data Augmentation and Topic Information <i>Kangkang Sun, Yonghong Tian, Xiaoli Zheng, Chang Ma</i>	204
A4.6 MDG:Multilingual Co-speech Gesture Generation with Low-level Audio Representation and Diffusion Models <i>Jie Yang, Feilong Bao</i>	210
B4: Natural Language Processing - III	
B4.1 Enhancing relation classification based on GCN Multi-hop Knowledge Graph Question Answering model of knowledge reasoning <i>Ying Wang, Guangyu Zhou, Kunli Zhang, Bohan Yu, Shuai Zhang, Hongying Zan</i>	216
B4.2 Emotion-Cause Pair Extraction Based on Dependency-injected Dual-MRC <i>Changyong Niu, Chen Liu, Hongde Liu, Yuxiang Jia, Hongying Zan</i>	222
B4.3 Preliminary Study on Chinese Stylistic Constructions and Resource Development <i>Guojing Huang, Gaoqi Rao</i>	228
B4.4 A Multi-Concept Semantic Representation System for Chinese Intent Recognition <i>Shan Yu, Pengyuan Liu, Hua Liu, Kaiyi Chen</i>	233
B4.5 Research on Enhancing Mandarin Initials Pronunciation Accuracy for Primary School Students in the Amdo Tibetan Regions <i>Sen Bao, Weitong Guo, Qian Luo, Lili Wang, Xiaolong Bu, Hongwu Yang</i>	239
B4.6 The Identification and Classification of Abnormal Collocations in Network Micro-language <i>Mengxiang Wang, Cheng Cao</i>	247
C1: Linguistics II	
C1.1 A Study on the Phonetic Variation of Wuqi Dialect <i>Yanmei Liu</i>	251
C1.2 Study on the evolution of duan(端) initials in Zhengzhou dialect <i>Xiaochuan Song, Yanping Wang</i>	257

C1.3 The Semantic Specificities and Construal Mechanisms of the Expectational Negative Adverb Xu in Chinese <i>Jinghan Zeng, Yulin Yuan</i>	263
C1.4 Research of Forensic Linguistics in Chinese and English Based on Bibliometric Analysis from 1992 to 2024 <i>Yinuo Liu</i>	269
C1.5 Investigating Linguistic Variation in Chinese Podcasts: A Quantitative Stylistic Perspective <i>Jie Bai, Xuelin Wang</i>	275
C1.6 Influence of Phonetic Context on L1 Negative Transfer in Phonology <i>Cenyu Xiang, Liwen Fu, Yanxiao Li, Yanlong Zhang</i>	281
D1: Research on Minority Languages in Artificial Intelligence - II	
D1.1 Multi-Perspective Transfer Learning for Automatic MOS Prediction of Low Resource Language <i>Pengkai Yin, Rui Liu, Feilong Bao, Guanglai Gao</i>	286
D1.2 Multi-modal Sentiment Analysis of Mongolian Language based on Pre-trained Models and High-resolution Networks <i>Yang Yang, Qing-Dao-Er-Ji Ren, Rui-Feng He</i>	291
D1.3 A Language-Driven Data Augmentation Method for Mongolian-Chinese Neural Machine Translation <i>Xuerong Wei, Qing-Dao-Er-Ji Ren</i>	297
D1.4 Finding Better Segmentation Granularity for Tibetan-Chinese Bidirectional Neural Machine Translation <i>Xiaoqiang Han, Weizhao Zhang</i>	303
D1.5 A Quantitative Study on the Senses Distribution Characteristics of the Mongolian Word "xar_a (жар)" <i>Hairi Shi, Dahubaiyila</i>	309
D1.6 Mongolian Pronunciation Data Enhancement Method Based on Separation Contrast Learning <i>Siyuan Guo, Zhiqiang Ma, Jiaqi Sun, Yixiong Qin</i>	314
C2: Speech Processing - II	
C2.1 End-to-end Tibetan emotional speech synthesis based on Mandarin emotions transfer <i>Weizhao Zhang, Wenxuan Zhang</i>	320
C2.2 Research on Teacher Classroom Teaching Speech Emotion Recognition Based on LSTM <i>Yimin He, Xiaoyong Lu, Dan Sun, Tao Pan, Yuqing Qiu, Jiahong Liu</i>	326

C2.3 Low Resource Language Adaptation using Two-stage Regularization for Multilingual ASR <i>Chin Yuen Kwok, Jia Qi Yip, Eng Siong Chng</i>	332
C2.4 Research on Speech Specificity of High Depression Tendency under Cognitive Load <i>Yimin He, Xiaoyong Lu, Dan Sun, Tao Pan, Yuqing Qiu, Jiahong Liu</i>	338
D2: Education - II	
D2.1 The Power of Personalized Datasets: Advancing Chinese Composition Writing for Elementary School through Targeted Model Fine-Tuning <i>Wenyi Xie, Jiachen Li, Yi Mu, Hanyu Zhang, Shiwen Zhao, Xinran Zheng</i>	344
D2.2 Video Library Construction for International Chinese Education <i>Jian Chen, Zhaoyong Yang, Gaoqi Rao, Endong Xun</i>	350
D2.3 The Construction and Application of a Picture Resource System for the International Chinese Language Education Field <i>Yijin Zhu, Yu Wang, Leiming Gao, Gaoqi Rao</i>	359
D2.4 An analysis report of textbook Good English based on ideological and political themes <i>Weihua Wang</i>	366
C3: Natural Language Processing - IV	
C3.1 A Dynamic Retrieval-Augmented Generation Framework for Border Inspection Legal Question Answering <i>Yanjun Zhang, Dapeng Li, Gaojun Peng, Shuang Guo, Yu Dou, Ruheng Yi</i>	372
C3.2 Depressive Corpus Construction of Feature Selection and Analysis <i>Dan Sun, Xiaoyong Lu, Yanqin Li, Yimin He, Yuqing Qiu, Jiahong Liu</i>	377
C3.3 Mongolian-Chinese Cross-lingual Topic Detection Based on Knowledge Distillation <i>Yanli Wang, Yatu Ji, Baolei Sun, Qing-Dao-Er-Ji Ren, Nier Wu, Na Liu, Min Lu, Chen Zhao, Yepai Jia</i>	383
C3.4 Generation and Validation of Teaching Examples Based on Large Language Models <i>Qing He, Yu Wang, Gaoqi Rao</i>	389
D3: Speech Processing - III	
D3.1 Analysis of Acoustic Characteristics and Gender Differences in Whispered Vowels <i>Tianxiang Cao, Liwen Fu, Yanxiao Li, Yanlong Zhang</i>	396
D3.2 A Mel Spectrogram Enhancement Paradigm Based on CWT in Speech Synthesis <i>Guoqiang Hu, Huaning Tan, Ruilai Li</i>	401
D3.3 ASR MODEL ADAPTATION WITH DOMAIN PROMPT TUNING <i>Pengpeng Zou, Jianhao Ye, Hongbin Zhou</i>	406

D3.4 MambaGAN: Mamba based Metric GAN for Monaural Speech Enhancement <i>Tianhao Luo, Feng Zhou, Zhongxin Bai</i>	411
D3.5 Effects of Rate of Articulation in Rhythm Formant Analysis-based Dialect Classification <i>Joyshree Chakraborty, Rohit Sinha, Priyankoo Sarmah</i>	417
D3.6 Two-stage and Self-supervised Voice Conversion for Zero-Shot Dysarthric Speech Reconstruction <i>Dong Liu, Yueqian Lin, Hui Bu, Ming Li</i>	423
C4: Natural Language Processing - V	
C4.1 Research on the Phonetic System of Urumqi Dialect <i>Hongmei Guo</i>	428
C4.2 The Labio-dental Initials of MC Zhi Group with Hekouhu Finals in Dialect of Liuzhi Town <i>Yingping Wang</i>	434
C4.3 Research on Automated Scoring Method for HSK Essays with Hybrid Features <i>Juncang Rao, Yanshan He</i>	439
C4.4 Investigation on the Usage and Development of Elements of Modern Western Medicine in China Based on Diachronic Newspaper Corpus <i>Yiwei Xu, Gaoqi Rao</i>	445
C4.5 Korean Dependency Parsing Using Deep Biaffine Dependency Parser <i>Danxin Cui, Yude Bi</i>	451