

# **2022 25th Conference of the Oriental COCOSDA International Committee for the Co-ordination and Standardisation of Speech Databases and Assessment Techniques (O-COCOSDA 2022)**

**Hanoi, Vietnam  
24-26 November 2022**



**IEEE Catalog Number: CFP2208H-POD  
ISBN: 979-8-3503-9857-1**

**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:	CFP2208H-POD
ISBN (Print-On-Demand):	979-8-3503-9857-1
ISBN (Online):	979-8-3503-9856-4
ISSN:	2163-3479

**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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## TABLE OF CONTENTS

### **SESSION 1: SPEECH RECOGNITION & SPEECH SYNTHESIS**

Development of a High Quality Text to Speech System for Lao .....	1
<i>Nguyen Thi Ngoc Anh, Nguyen Tien Thanh, Le Nhat Minh</i>	
NICT-Tib1: A Public Speech Corpus of Lhasa Dialect for Benchmarking Tibetan Language Speech Recognition Systems .....	6
<i>Kak Soky, Zhuo Gong, Sheng Li</i>	
The Speech Labeling and Modeling Toolkit (SLMTK) Version 1.0.....	11
<i>Chen-Yu Chiang, Wu-Hao Li, Yen-Ting Lin, Jia-Jyu Su, Wei-Cheng Chen, Cheng-Che Kao, Shu-Lei Lin, Pin-Han Lin, Shao-Wei Hong, Guan-Ting Liou, Wen-Yang Chang, Jen-Chieh Chiang, Yen-Ting Lin, Yih-Ru Wang, Sin-Horng Chen</i>	
Toward Automatic Generation of Transcript from Spoken Lectures: The "Dream of the Red Chamber" Series .....	16
<i>Tzu-Han Lin, Kuan-Lin Lee, Hsin-Yun Chung, Fu-Hai Frank Wu, Jui-Chu Li, Tung-Lung Li, Shih-Lung Lo, Yi-Wen Liu, Jason S. Chang</i>	
End-To-End Named Entity Recognition for Vietnamese Speech.....	22
<i>Thu-Hien Nguyen, Thai-Binh Nguyen, Quoc-Truong Do, Tuan-Linh Nguyen</i>	
MNASR: A Free Speech Corpus for Mongolian Speech Recognition and Accompanied Baselines .....	27
<i>Yihao Wu, Yonghe Wang, Hui Zhang, Feilong Bao, Guanglai Gao</i>	

### **SESSION 2: SPEECH PROSODY**

Patterns of Vowel Production in the Speakers of Sanskrit Language.....	33
<i>Pooja Gambhir, Amita Dev, Poonam Bansal</i>	
The Interaction Pattern of Focal Accent and Declarative Intonation in Mongolian .....	40
<i>Aomin, Aijun Li</i>	
Neural Network Models for User Attribute Extraction from Dialogues .....	47
<i>Son Dang, Pham Quang Nhat Mink</i>	
Multilingual Analysis of Intelligibility Classification Using English, Korean, and Tamil Dysarthric Speech Datasets .....	53
<i>Eun Jung Yeo, Sunhee Kim, Minhwa Chung</i>	
Nasality in Zhangzhou: Distribution and Constraint .....	59
<i>Yishan Huang</i>	
A Corpus-Based Analysis of Age-Related Changes in the Acoustic Features of Elderly to Super Elderly Speech.....	65
<i>Meiko Fukuda, Masakazu Sugiyama, Ryota Nishimura, Yurie Iribe, Kazumasa Yamamoto, Norihide Kitaoka</i>	

## **SESSION 3: POSTER**

Towards the Development of Accent Conversion Model for (L1) Bengali Speaker Using Cycle Consistent Adversarial Network (Cyclegan) .....	71
<i>Sabyasachi Chandra, Puja Bharati, Shyamal Kumar Das Mandal</i>	
Speaking-Rate Effect on Prosodic Grammar of Mandarin Read Speech .....	76
<i>Yu-Siang Hong, Chen-Yu Chiang, Yih-Ru Wang, Sin-Horng Chen</i>	
An Automated Speech Recognition System for Phonological Awareness of Kindergarten Students in Filipino .....	82
<i>Jazzmin R. Maranan</i>	
Experimentation of Various Preprocessing Pipelines for Sentiment Analysis on Twitter Data About New Indonesia's Capital City Using SVM and CNN .....	89
<i>Siska Pebiana, Nuraisa Novia Hidayati, Dian Isnaeni Nurul Afra, Elvira Nurfadhilah, Harnum Annisa Prafitia, Junanto Prihantoro, Radhiyatul Fajri, M. Teduh Uliniansyah, Agung Santosa, Lyla Ruslana Aini, Yosi Sahreza, Aulia Haritsuddin Karisma Muhammad Subekti, Josua Geovani Pinem, Muhammad Reza Alfin, Agung Septadi, Siti Shaleha, Gembong Satrio Wibowanto, Asril Jarin, Gunarso, Andi Djalal Latief, Hammam Riza</i>	
Harvard-NGSL Sentences for English Learner Speech Corpora.....	95
<i>Kakeru Yazawa</i>	
Acoustical Analysis of Speech of ASD Children and Typically Developing Children.....	100
<i>Babita Saxena, Sunita Arora, Karunesh Arora, Hemant Keshwal</i>	
Designing a Speaking Assessment Task Using Elicited Imitation to Build a Korean Learner Corpus .....	106
<i>Chang Kyung Song, Hye Yun Jeong, Ho Jung Kim</i>	
Analysis on the Interference of Chinese /N/-/L/ Confusion to Japanese /N/-/R/ Discrimination by Chinese JFL Learners .....	113
<i>Cenyu Xiang, Tianxiang Cao, Yanlong Zhang</i>	
Creakiness Judgments by Burmese and Vietnamese Speakers.....	119
<i>Julián Villegas, Seunghun J. Lee</i>	
Text to Speech System for Lambani - A Zero Resource, Tribal Language of India .....	124
<i>Ashwini Dasare, Deepak K. T., Mahadeva Prasanna, Samudra Vijaya K</i>	
Production and Perception of Intonation Features by Cantonese EFL Learners .....	130
<i>Chenyang Zhao, Ziyu Xiong, Aijun Li</i>	
Analysis of Layer-Wise Training in Direct Speech to Speech Translation Using Bi-LSTM .....	135
<i>Lalaram Arya, Ayush Agarwal, Jagabandhu Mishra, S. R. Mahadeva Prasanna</i>	
The Influence of Working Memory on Intonation Production of Chinese EFL Learners .....	141
<i>Gu Ronghao, Ji Xiaoli, Zhu Yuhan</i>	

## **SESSION 4: MULTIMODAL DATABASES**

UIT-VLFC: Vietnamese Lipstick Feedbacks Corpus.....	147
<i>Binh Van Duong, An Trong Nguyen, Chien Nhu Ha, Hong-Hanh Thi Duong, My-Linh Thi Tran, Trong-Hop Do</i>	

ESAA: An EEG-Speech Auditory Attention Detection Database.....	152
<i>Peiwen Li, Enze Su, Jia Li, Siqi Cai, Longhan Xie, Haizhou Li</i>	
A Speech Corpus for Chronic Kidney Disease.....	158
<i>Jihyun Mun, Sunhee Kim, Myeong Ju Kim, Jiwon Ryu, Sejoong Kim, Minhwa Chung</i>	
Building a Speech Corpus of Children with Cochlear Implants Via an Enhanced Metadata Structure .....	164
<i>Seonwoo Lee, Sunhee Kim, Minhwa Chung</i>	
Taiwanese Across Taiwan Corpus and Its Applications.....	170
<i>Yuan-Fu Liao, Jane S. Tsay, Peter Kang, Hui-Lu Khoo, Le-Kun Tan, Li-Chen Chang, Un-Gian Iunn, Huang-Lan Su, Tsun-Guan Thiann, Hak-Khiam Tiun, Su-Lian Liao</i>	

## **SESSION 5: LANGUAGE LEARNING**

The Effect of Acoustic Features on Chinese EFL Learners' Perception of English Accentual Prominence.....	175
<i>Weizhong Zhang, Jian Gong, Xiaoli Ji, Yuhong Sun, Kai Sheng</i>	
Designing a Korean French-Learners' Speech Corpus (KFLSC) for Spoken Language Assessment .....	181
<i>Soeun Park, Jihye Chun, Mi Hyun Kim, Hyunjoo Lee, Seong Heon Lee, Sunhee Kim</i>	
Syntactic Complexity in Narrative Speech Produced by Prelingually Deaf Mandarin-Speaking Children with Cochlear Implants.....	187
<i>Jue Yu, Han Sun, Zhaoqi Dong</i>	
VoisTUTOR 2.0: A Speech Corpus with Phonetic Transcription for Pronunciation Evaluation of Indian L2 English Learners .....	193
<i>Priyanshi Pal, Chiranjeevi Yarra, Prasanta Kumar Ghosh</i>	
Spanish Stops and Their Allophones Produced by Proficient Mandarin Learners of Spanish .....	199
<i>Xiaotong Xi, Peng Li</i>	
NASAM 2.0: Cleft-Palate Speech Assessment Application.....	205
<i>Nattapong Kurpukdee, Kwanchiva Thangthai, Vataya Chunwijitra, Patcharika Chootrakool, Sawit Kasuriya</i>	

## **SESSION 6: DIALECTS AND ACCENTS**

Effects of the Syntactic Structure on the Productivity of Tone Sandhi Rules: In the Case of Xiamen Dialect .....	211
<i>Yiying Hu, Hui Feng</i>	
Improving Vietnamese Accent Recognition Using ASR Transfer Learning.....	216
<i>Bao Thang Ta, Xuan Vuong Dang, Quang Tien Duong, Nhat Minh Le, Van Hai Do</i>	
Transliteration of Foreign Words in Burmese: Descriptions by a Mortise-And-Tenon Notation .....	222
<i>Chenchen Ding, Win Pa Pa, Masao Utiyama, Eiichiro Sumita</i>	
Korean Dialect Identification Based on an Ensemble of Prosodic and Segmental Feature Learning for Forensic Speaker Profiling.....	228
<i>Jooyoung Lee, Kyung Wha Kim, Minhwa Chung</i>	

## **COUNTRY REPORTS**

China .....	234
<i>Aijun Li, Dong Wang</i>	
Hongkong.....	235
<i>Tan Lee</i>	
India.....	236
<i>S.S. Agrawal</i>	
Indonesia .....	237
<i>Hammam Riza</i>	
Japan.....	238
<i>Satoshi Nakamura</i>	
Korea .....	239
<i>Yong-Ju Lee</i>	
Malaysia .....	240
<i>Zuraidah Mohd Don</i>	
Myanmar .....	241
<i>Win Pa Pa</i>	
Philippine .....	242
<i>Nathaniel Oco</i>	
Singapore.....	243
<i>Haizhou Li</i>	
Taiwan.....	244
<i>Hsin-Min Wang, Yuan-Fu Liao</i>	
Thailand.....	245
<i>N/A</i>	
Vietnam .....	246
<i>Luong Chi Mai</i>	

## **Author Index**