# A COUNTRY REPORT — OCOCOSDA ACTIVITIES IN CHINA

## Aijun LI , \*Dong WANG



Institute of Linguistics, Chinese Academy of Social Sciences \*Research Institute of Information Technology, Tsinghua University

The 24th Conference of the Oriental COCOSDA 18-20 November 2021, Singapore



# THE PROJECT FOR THE PROTECTION OF LANGUAGES RESOURCES IN CHINA

Ministry of Education of the People's Republic of China / State Language Commission

Time	The first phase: <b>2015-2019</b> . The second phase: <b>2021-2025</b> .
Area	<b>34</b> provinces, autonomous regions and municipalities across the country.
Language	<b>123</b> languages and all Chinese dialects.
Location	1712.
Speaker	More than <b>9000</b> .
Content	The pronunciation (1000), vocabulary (1200), sentence (50), long-form corpus, oral cultural corpus and all audio and video recordings specified in the survey manual.



#### The Chinese Language Resource Collection and Service Platform (<u>https://zhongguoyuyan.cn/</u>):

More than 10 million original corpus file data, among them, audio and video data each more than 5 million, with a total physical capacity of 100 TB.





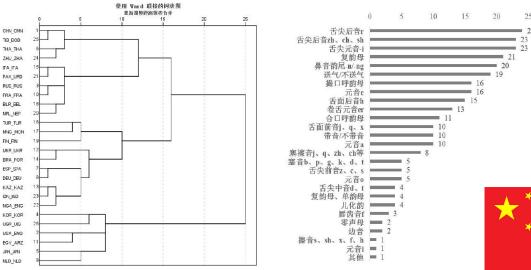
# GLOBAL ACCENT CHINESE ——The Database of Typical Chinese Speech Errors: From Worldwide Learners (http://www.globalaccentchinese.com/)

- Speech errors collected from Chinese learners in 36 L1s.
- Two basic parts of the database: (1) speech error descriptions (speech error items); (2) audios with typical speech errors from 36 L1s (learners' accent Chinese).
- Accent audios from each L1 consist of sounds of:
- (1) isolate syllables; (2) bi-syllabic/tri-syllabic words; (3) sentences; (4) a dialogue (*a call from sister*, 201 syllables covering 4 tones, 22 initials, 39 finals, neutral tones, all kinds of tone sandhi, interjections and usual sentence types in standard Chinese).





- 4 speakers for each accent Chinese: 2 learners (1 male, 1 female); 2 native speakers (1 male, 1 female).
- **529** speech error items from learners **25** L1s.
- $\approx 10010$  audio files ( ( 50+30+20+1 ) \*4\*25=10100).
- 1 new utility patent.
- **Multiple** explorations have been made based on the database.





#### NORTHWEST MINZU UNIVERSITY

#### Ethnic Languages

- Tibetan
- Lexicon : **10k** words
- Text: 100 Mb news, 1GB online text, 1**00k** Tibetan-Chinese pairs
- Speech: 1000 monosyllabic words produced by 100 speakers from 20 dialects, 30-minute recordings of 300 speakers
  - Mongolian
- Phonetic database: **2000** words produced by **20** speakers
- 200 multimodal phonetic database of Mongolian long tune, Tibetan folk songs, *Hua'er, Jianger* and other oral cultures
  - Other Ethnic Languages
- Phonetic database of Western Yugu, Eastern Yugu, Dongxiang, Baoan, and Salar: 1000 words produced by 4 speakers each

#### **&** Gansu Dialects

• **3000** words, **50** sentences, **30-minute** dialogue among three interlocutors, produced by **100** speakers in **27** dialects

#### Child Language

• 5 speakers of 3-18 months old



#### **CNCeleb: Multi-Genre** Speaker Recognition Corpus

- **3,000** Chinese Celebrities
- **11** copmlex genres
- **803** hours, **659k** utts.
- **Free** for research



Genres	CN-Celeb1			CN-Celeb2		
	# of Spks	# of Utters	# of Hours	# of Spks         # of Utters           66         1,542           268         13,116           616         31,982           519         34,024           388         167,019           133         4,449	# of Hours	
Advertisement	17	120	0.18	66	1,542	3.86
Drama	160	7,247	6.43	268	13,116	16.32
Entertainment	483	22,064	33.67	616	31,982	60.84
Interview	780	59,317	135.77	519	34,024	81.28
Live Broadcast	129	8,747	16.35	388	167,019	439.95
Movie	62	2,749	2.20	133	4,449	5.77
Play	69	4,245	4.95	127	14,992	22.04
Recitation	41	2,747	4.98	218	58,231	129.18
Singing	318	12,551	28.83	394	42,157	75.19
Speech	122	8,401	36.22	394	36,680	82.58
Vlog	41	1,894	4.15	488	125,293	177.00
Overall	1,000	130,109	273.73	2,000	529,485	1090.01



### **Commercial Activities**





#### www.speechocean.com



Languages in China	Speakers: 88,000+ Hours: 78,000+	Mandarin, Accented Manda	rin, Cantonese, etc.	Mandarin Corpus			
English	Speakers: 15 000+	US English, UK English, etc	<b>).</b>	Smart HomeTTS1200 speakers, 3200 Hours2070 speakers, 700 Hours			
Other Majority Languages	•	Spanish, Russian, French, ( Japanese, Korean, etc.	German, Italian,	<b>3</b> 00	Meeting speakers, 2000 Hours	<ul><li>7000 speakers</li></ul>	<b>Other</b> 5, 5000 Hours
Minority Languages	•	Afrikaans, Bulgarian, Eston Croatian, Hungarian, Indon		Car EV	2000 speakers, 6000 Hours		
TTS Speech Corpus		Mandarin, Cantonese, Engl Portuguese, Japanese, etc.	• • • • • • • • • • • • • • • • • • •				
Lexicon	160+ Languages, 100,000 minority languages menti	,000+ Entries, including most of the major &Hindi Speech Corpusned above.600 speakers, 550 Hours2000 speakers, 6000 Hours				6000 Hours	
WAGIC DATA Data Set Your Mind www.magicdatatech.com			Arabic Speed	<b>:h Corpus</b> 1348 speakers, 899 Hours	2000 speakers,	6000 Hours	
Industry					glish Speech Corpus 2000 speakers, 987 Hours	2000 speakers,	6000 Hauna
Financial services	Vehicle	Social Smart Hor	ne Smart Devices		2000 speakers, 501 mours	<ul> <li>2000 speakers,</li> </ul>	oooo nours
Datasets				Open	AISHELL-1	400 speakers, 178H 1991 speakers, 1000H	Challenge Dataset
	Language	Conversational Speech	Read Speech	Source	AISHELL-2 AISHELL-3	218 speakers, 85H	Dalaset
Chinese Mandarin Dialect Accented Mandarin		78900 Speakers/ 65000 Hours	72600 Speakers/ 25600 Hours		AISHELL-4	60 speakers, 120H	254 speakers, 1561H
Children Mandarin Chinese-English Code-Mixing English US English Other Accented English		3000 Speakers/ 12500 Hours	28200 Speakers/ 14300 Hours	Test Dataset	2018-EVAL Dataset 2019-EVAL Dataset	15 speakers, 5H 148 speakers, 500H	DMASH 2020 518 speakers, 464H
Other Languages German,Italian,French,Spanish,Portuguese,Russian Filipino,Indonesian,Malay,Thai,Turkish Japanese,Korean,,Vietnamese,Arabic,Urdu,Hindi		23500 Hours	16500 Speakers/ 11000 Hours		2021-EVAL Dataset	3219 speakers, 28H	http://2020.ffsvc.org/
	Total	150,0	00+ Hours				

## **Commercial Activities**



#### www.datatang.com



http://www.huitingtech.com/

Chinese	Childrer Dialect(Cantonese Min, Henan, Wuhar Mongolian/Uygh	cented Mandarin n Mandarin e, Sichuan, Shangha n, Changsha and etc nur/Kazakh/Tibetan English Mixed		0000 Hours 000 Speakers Uygur / Ti Manda		Mandarin Accented Mandarin Children Mandarin Elderly Mandarin Dialect 'ibetan /Mongolian Cantonese arin English Mixed	40000 Speakers 30000 Hours
English	27 countries speaking English, including: US English, UK English, Other Accented English		13000 Hour		Cantonese English Mixed English UK English US English		
			26000 Speake	ers Engli			2200 Speakers
Other	36 Languages, including: Japanese, Korean, Malay, Indonesian, Russia, French, German, Spanish and etc.		32000 Hour	s	Othe	2100 Hours	
Languages			60000 Speake		r Languages rench, German, Italian	3900 Speakers	
Parallel	CH-EN, CH-RU, CH-JA, CH-FR, KO-EN,		12 million pa		Brazilian Portuguese, Japanese, Korean		2100 Hours
Corpora	JA-EN and etc.			-			
Free Database							
Primewords	Mandarin Speech, 1600h	DataTang	Mandarin Speech, 1050h	AIShell	AI Shell 1-4	Mobvoi	Hotwords, 36k utt
MAGICDAT A	Mandarin Speech, 755h	SpeechOcea n	5000 English utt. pronunced by Chinese children. Fluency marked by 5 annotators.			Databaker	TTS 10k female, 12h