

Yubin Zhang

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<https://pkuzbyb.github.io/index.html>

Education

2019-present	PhD in Linguistics , Department of Linguistics, University of Southern California Dissertation: Sentence intonation: a dynamical gestural approach Committee: Louis Goldstein (chair), Dani Byrd, Khalil Iskarous, Shrikanth Narayanan
2016-2017	MSc in Phonetics Department of English Language and Linguistics, University of Edinburgh, Scotland, UK
2013-2016	B.S. in Psychology School of Cognitive and Psychological Sciences, Peking University, Beijing, China
2012-2016	B.A. in Chinese Linguistics Department of Chinese Language and Literature, Peking University, Beijing, China

Publications

Journal Articles

2024	Shi X., Feng T., Huang K., Kadiri S., Lee J., Lu Y., Zhang Y. , Goldstein L., Narayanan S. S. (2024). Direct articulatory observation reveals phoneme recognition performance characteristics of a self-supervised speech model. <i>JASA Express Letters</i> , 4(11). Zhang, Y. (2024). Central Tibetan (Lhasa). <i>Journal of International Phonetic Association</i> , 1-23. Zhang, Y. (2024). Phonetic categorization in phonological lexical neighborhoods: Facilitatory and inhibitory effects. <i>Attention, Perception, & Psychophysics</i> , 1-17.
2022	Shao, J., Zhang, C., Zhang, G., Zhang, Y. , & Pattamadilok, C. (2022). The effects of alphabetic literacy, linguistic-processing demand and tone type on the dichotic listening of lexical tones. <i>Frontiers in Psychology</i> , 13, 877684.
2021	Zhang, Y. , Pattamadilok, C., Lau, D. K.-Y., Bakhtiar, M., Yim L.-Y., Leung, K.-Y., & Zhang, C. (2021). Early auditory ERPs are modulated by alphabetic literacy skills in logographic Chinese readers. <i>Frontiers in Psychology</i> , 12:663166.

- 2020 **Zhang, Y.** & Kirby, J. (2020). The role of F_0 and phonation cues in Cantonese low tone perception. *The Journal of the Acoustical Society of America*, 148(1), EL40-EL45.
- Cheung, Y. L., Zhang, C., & **Zhang, Y.** (2020). Emotion processing in congenital amusia: the deficits do not generalize to written emotion words. *Clinical Linguistics & Phonetics*, 1-16.

Conference Proceedings

- 2025 **Zhang Y.**, Kumar P., Tian Y., Zhao Z., Shi X., Huang K., Lee K., Hsu H., Narayanan S., Nayak K., Goldstein L. (2025). Co-registration of real-time MRI and respiration for speech research. *Proceedings of the 25th Annual Conference of the International Speech Communication Association*, Vol. 2025, 2175-2179.
- Shi X., **Zhang Y.**, Lu Y., Ma M., Feng T., Toutios A., Hsu H., Goldstein L., Narayanan S. (2025). 75-Speaker Annot-16: A benchmark dataset for speech articulatory rt-MRI annotation with articulator contours and phonetic alignment. *Proceedings of the 25th Annual Conference of the International Speech Communication Association*, Vol. 2025, 983-987
- 2024 **Zhang, Y.**, Lu, Y., Rialland, A., Harper, S., Goldstein, L. (2024). Intensity downtrends in Embosi intonation. *Proceedings of 13th International Seminar on Speech Production*, 987-991.
- 2023 **Zhang, Y.** & Goldstein, L. (2023). Stop voicing and devoicing as articulatory tasks: A cross-linguistic RT-MRI study. *Proceedings of 20th International Congress of Phonetic Sciences*, 222-225.
- Wu, P., Li, T., Lu, Y., **Zhang, Y.**, Lian, J., Black, A. W., Goldstein, L., Watanabe, S. & Anumanchipalli, G. K. (2023). Deep speech synthesis from MRI-based articulatory representations. *Proceedings of the 24th Annual Conference of the International Speech Communication Association*, Vol. 2023, 5132-5136.
- 2019 **Zhang, Y.** (2019). Individual variability of acoustic-perceptual mapping in ongoing merger: Observations from Cantonese Tone 4/Tone 6. *Proceedings of the 30th North American Conference on Chinese Linguistics*, 64-81.
- 2018 Zhang, G., Shao, J., **Zhang, Y.** & Zhang, C. (2018). Revisiting hemispheric lateralization for Cantonese lexical tone processing in dichotic listening. *Proceedings of Sixth International Symposium on Tonal Aspects of Languages*, 129-133.

Presentations (without proceedings)

- 2024 **Zhang, Y.**, Lu, Y., Rialland, A., Harper, S., Goldstein, L. (2024). Acoustic properties of utterance-final prosodic events in Embosi. Poster presented at *the 187th Meeting of the Acoustical Society of America*.

- 2023 **Zhang, Y.**, Rialland, A., Lu, Y., Harper, S., & Goldstein, L. (2023). A dynamical systems approach to F0 hard-landing downtrends in Embosi. Poster presented at *Hanyang International Symposium and Cognitive Sciences of Language 2023*, Seoul, South Korea.
- 2021 **Zhang, Y.**, Zevin D. Jason. (2021). Rhyme neighbors inhibit lexical facilitation in phonetic categorization. Poster presented at *Psychonomic Society 62nd Annual Meeting*
- 2020 **Zhang, Y.** (2020). Consonant F0 is not intrinsic perturbation: Preliminary data from Nuosu Yi. Poster presented at *the 12th International Seminar on Speech Production*, New Haven, Connecticut, United States.
- 2018 **Zhang, Y.**, Pattamadilok, C., Lau, D. K. Y., Bakhtiar, M., Yim L. Y., Leung, K. Y., and Zhang, C. (2018). The impact of first language alphabetic orthography on Cantonese phoneme judgement: an ERP study. Poster presented at *the 10th Annual Meeting for the Society of Neurobiology of Language*, Quebec City, Canada.
- Zhang, Y.**, Chan, S. W., Zhang, C. (2018). How does first language alphabetic orthography influence sound variation and change? Evidence from Hong Kong Cantonese. Poster presented at *the 10th Annual Meeting for the Society of Neurobiology of Language*, Quebec City, Canada.
- Zhang, Y.** (2018). Variation in Cantonese Tone 4 and Tone 6 perception. Talk given at *30th North American Conference on Chinese Linguistics*, Columbus, Ohio, USA.

Honors & Awards

- 2025 Teresa Wilson Endowed Fellowship, University of Southern California
- 2024 Gold Family Graduate Fellowship, University of Southern California
- 2020 Hearing and Communication Neuroscience (HCN) Pre-doctoral Training Fellowship (NIH T32 Training Grant), University of Southern California
- 2019 USC Dornsife/Graduate School Fellowship, University of Southern California
- 2016 Eric Liddell China Saltire Scholarship, University of Edinburgh
Scotland Saltire Scholarship, University of Edinburgh
- 2015 Chun-Tsung Scholar for undergraduate scientific research, sponsored by the Nobel Prize winner Dr. T. D. Lee, Peking University

Service

Departmental service

- 2017 Class representative of Phonetics, University of Edinburgh

Teaching & Research Experience

Teaching

Oct. 2025	Guest Lecturer , Department of Linguistics, University of Southern California Topic: Acoustic analysis of speech prosody Course: Speaker Identification (LING 450) Instructor: Sandra Ferrari Disner
2023	Teaching Assistant , Department of Linguistics, University of Southern California Course: Human Language and Technology (LING 285) Instructor: Mary Byram Washburn
2016	Part-time Assistant , Y-English, Beijing, China Program: English Vocabulary Builder based on Proto-Indo-European roots
Research	
2023-2024	Research Assistant , Department of Linguistics, University of Southern California Project: Flexible deep speech synthesis through gestural modeling (PI: Louis Goldstein, funded by NSF)
2017-2019	Research Assistant , Department of Chinese and Bilingual Studies & Research Center for Language, Cognition and Neuroscience, Hong Kong Polytechnic University, Hong Kong, China Projects: Effects of alphabetic literacy skills on speech perception; Prosodic characteristics of neonates' cries in Hong Kong; Tone and music perception in Chinese-speaking amusics

Skills

Language	Mandarin Chinese (advanced), English (advanced), Cantonese (advanced), Japanese (basic)
Technical skills	Behavioral experiment design, data collection and analysis; Speech audio data acquisition and acoustic phonetic analysis; Neuroimaging data collection and analysis, such as electroencephalography (EEG); Speech production data collection and analysis, such as electroglottography (EGG), respiration tracker, and vocal tract real-time magnetic resonance imaging (RT-MRI, co-administered with MRI engineers); Multimodal speech corpus development (design, data curation and annotation) Documentation and revitalization of under-resourced languages (e.g., Sino-Tibetan and African languages)
Programming	Python, Matlab, R, Praat