

Yubin Zhang

PhD candidate,
Department of Linguistics,
University of Southern California
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<https://pkuzbyb.github.io/index.html>

Education

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| 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

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| 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

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| | Embosi. Poster presented at <i>Hanyang International Symposium and Cognitive Sciences of Language 2023</i> , Seoul, South Korea. |
| 2021 | Zhang, Y. , Zevin D. Jason. (2021). Rhyme neighbors inhibit lexical facilitation in phonetic categorization. Poster presented at <i>Psychonomic Society 62nd Annual Meeting</i> |
| 2020 | Zhang, Y. (2020). Consonant F0 is not intrinsic perturbation: Preliminary data from Nuosu Yi. Poster presented at <i>the 12th International Seminar on Speech Production</i> , 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 <i>the 10th Annual Meeting for the Society of Neurobiology of Language</i> , 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 <i>the 10th Annual Meeting for the Society of Neurobiology of Language</i> , Quebec City, Canada. |

Honors & Awards

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| 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

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| 2017 | Class representative of Phonetics, University of Edinburgh |
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Teaching & Research Experience

Teaching

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| 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

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| Language | Mandarin Chinese (advanced), English (advanced), Cantonese (advanced), Japanese (basic) |
| Experimental techniques | 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 |