# Zhe-chen Guo (郭哲宸)

zcadamguo@utexas.edu

**\** +1 512-471-1701

305 E. 23rd Street STOP B5100, Robert L. Patton Hall 4.304, Austin, TX 78712

a zc-guo.github.io

sf.io/4pq2c

**1** 0000-0003-0870-8321

### **Education**

Ph.D. Candidate in Linguistics, University of Texas at Austin (UT Austin) Committee: Rajka Smiljanic (chair), Scott Myers, Fernando Llanos, Georgia Zellou	2018 – 2023 (expected)
M.A in Applied Linguistics, National Sun Yat-sen University (NSYSU)  Thesis title: The cue of rising tone to spoken word segmentation: A study of listeners of Taiwanese Southern Min  Committee: Shu-chen Ou (chair), Aleck Shih-wei Chen, Yung-hsiang Shawn Chang	2017
B.A. in Foreign Languages and Literature, NSYSU	2014

### **Publications**

### Peer-reviewed journal articles:

- 1. **Guo, Z.-C.**, & Smiljanic, R. (under review). Speakers coarticulate less in response to both real and imagined communicative challenges: An acoustic analysis of the LUCID corpus. *Journal of Phonetics*.
- 2. Ou, S.-C., & **Guo, Z.-C.** (2022). The effect of lengthening aspiration on speech segmentation. *JASA Express Letters*, 2(4), 045202. doi:10.1121/10.0010242
- 3. **Guo, Z.-C.**, & Smiljanic, R. (2021). Speaking clearly improves speech segmentation by statistical learning under optimal listening conditions. *Laboratory Phonology: Journal of the Association for Laboratory Phonology*, 12(1), 14. doi:10.5334/labphon.310
- 4. **Guo, Z.-C.**, & Ou, S.-C. (2021). The use of tonal coarticulation in segmentation of artificial language speech: A study with Mandarin listeners. *Applied Psycholinguistics*, 42(3), 631–655. doi:10.1017/S0142716420000818
- 5. Ou, S.-C., & **Guo**, **Z.-C.** (2021). The language-specific use of F0 rise in segmentation of an artificial language: Evidence from listeners of Taiwanese Southern Min. *Language and Speech*, 64(2), 437–466. doi:10.1177/0023830919886604
- 6. Ou, S.-C., & **Guo**, **Z.-C.** (2021). The differential effects of vowel and onset consonant lengthening on speech segmentation: Evidence from Taiwanese Southern Min. *The Journal of Acoustical Society of America*, 149(3), 1866–1877. doi:10.1121/10.0003751
- 7. **Guo, Z.-C.**, & Ou, S.-C. (2014). Perception of articulatorily different Mandarin retroflexes by Japanese speakers: A pilot study. *NTU Working Papers in Chinese Language Teaching*, 2, 1–28. Taipei: National Taiwan University. doi:10.6664/NTUTCSL.201408 (2).0004
- 8. Ou, S.-C., & Guo, Z.-C. (2014). Mandarin retroflex sounds perceived by non-native speakers. *Journal of Language and Literature Studies*, 26, 41–76.

### **Peer-reviewed conference proceedings:**

- 1. **Guo, Z.-C.**, & Smiljanic, R. (2021). Speakers coarticulate less when facing real and imagined communicative difficulties: An analysis of read and spontaneous speech from the LUCID corpus. In *Proceedings of Interspeech 2021* (pp. 4009–4013). doi: 10.21437/Interspeech.2021-1640 (presented virtually, Brno, Czechia, August 30–September 3)
- 2. Ou, S.-C., & **Guo, Z.-**C. (2020). The opposite effects of vowel and onset consonant lengthening on speech segmentation. In *Proceedings of the 10th International Conference on Speech Prosody*. doi:10.21437/SpeechProsody.2020-16 (presented virtually, Tokyo, Japan, May 24–28)
- 3. **Guo, Z.-C.**, & Ou, S.-C. (2019). The use of tonal coarticulation in speech segmentation by listeners of Mandarin. In *Proceedings of the 19th International Congress of Phonetic Sciences*. (orally presented, Melbourne, Australia, August 4–10)
- 4. Ou, S.-C., & **Guo**, **Z.-C.** (2019). The role of initial F0 rise in speech segmentation: A cross-linguistic study. In *Proceedings of the 19th International Congress of Phonetic Sciences*. (presented in poster format, Melbourne, Australia, August 4–10.)

5. Ou, S.-C., & **Guo**, **Z.-C.** (2015). The effect of stress on English word recognition by native speakers of typologically different languages. In *Proceedings of the 18th International Congress of Phonetic Sciences*. (orally presented, Glasgow, UK, August 10–14.)

## Fellowships/Grants/Honors

Graduate Continuing Fellowship Graduate School, UT Austin	2022 – 2023
Taiwanese Overseas Pioneers Grants (\$900,000 NTD) National Science and Technology Council, Taiwan	2022 - 2023
Dissertation Fellowship for ROC Students Abroad (\$20,000, declined) Chiang Ching-kuo Foundation for International Scholarly Exchange	2022
Graduate Research Fellowships (\$1,000) British, Irish and Empire Studies (BIES) program, UT Austin	2022
Interspeech 2021 travel grant International Speech Communication Association	2021
Carlota Smith Fellowship (\$1,231) Department of Linguistics, UT Austin	2020
Government Scholarship to Study Abroad (\$32,000) Ministry of Education, Taiwan	2019 – 2021
Acoustical Society of America Student Travel Subsidies (\$270)	2019 - 2021
Professional Development Awards (\$1,499)	2019
Spring Supplemental Graduate Fellowship (\$5,000) Graduate School, UT Austin	2019
Candidate for Best Master's Thesis of the Year Linguistic Society of Taiwan	2017
Five-year B.A./M.A. Combined Degree Program Fellowship (\$120,000 NTD)  Department of Foreign Languages and Literature, NSYSU	2014 – 2015
College Student Research Grant (\$43,000 NTD)  Ministry of Science and Technology, Taiwan (Project ID: 102–2815–C–110–010–H)	2013 – 2014
NSYSU Excellent Student Award (5 awards, \$30,000 NTD total)	2011 - 2013

### **Conference Presentations**

- \*: listed as citable abstract
- 1. **Guo, Z.-C.,** & Smiljanic, R. (2022). Coarticulatory vowel nasalization in read and listener-directed speech across communicative contexts: An analysis of the LUCID corpus. Paper to be presented at the *18th Conference on Laboratory Phonology (LabPhon 18)*, online conference, June 23–25.
- 2. Ou, S.-C., & Guo, Z.-C. (2022). Is onset-consonant lengthening a universal word beginning cue? A cross-linguistic study of English and French listeners. Paper presented virtually at the 29th Manchester Phonology Meeting, May 25–27.
- 3. \*Guo, Z.-C., & Smiljanic, R. (2022). The degree and time course of nasal coarticulation across communicative contexts: A study of the LUCID corpus. *The Journal of the Acoustical Society of America*, 151(4), A65. doi: 10.1121/10.0010676 (poster presentation at the 182nd Meeting of the Acoustical Society of America, Denver, May 23–27)
- 4. \*Guo, Z.-C., & Smiljanic, R. (2021). Coarticulation across communicative contexts: An acoustic analysis of the LUCID corpus using spectral and temporal measures. *The Journal of the Acoustical Society of America*, 150(4), A70. doi:10.1121/10.0007659 (poster presentation, Seattle, November 29–December 3)
- 5. Ou, S.-C., & **Guo**, **Z.-C.** (2021). The effect of aspiration lengthening on speech segmentation: An artificial language learning study. Paper presented virtually at the *28th Manchester Phonology Meeting*, May 26–28.
- 6. \*Guo, Z.-C. (2020). Tonal carryover assimilation is exploited as a speech segmentation cue in the case of cue conflict. *The Journal of the Acoustical Society of America*, 148(4), 2504–2504. doi:10.1121/1.5146952 (presented virtually, December 7–11)

- 7. Ou, S.-C., & Guo, Z.-C. (2020). The effects of segment lengthening on speech segmentation. Paper presented at the *13th International Symposium on Taiwanese Languages and Teaching*, National Tsing Hua University, Hsinchu, October 16–17.
- 8. \*Guo, Z.-C., & Smiljanic, R. (2019). Speaking clearly improves speech segmentation in optimal listening conditions. *The Journal of the Acoustical Society of America*, 146(4), 3052–3052. doi:10.1121/1.5137579 (poster presentation, San Diego, California, December 2–6)
- 9. Ou, S.-C., & Guo, Z.-C. (2018). The role of lexical tone in speech segmentation by listeners of Taiwanese Southern Min: A corpus and experimental study. Oral presentation at the 7th International Conference on Phonology and Morphology, Seoul, Korea, June 29–30.
- 10. Ou, S.-C., & **Guo**, **Z.-C.** (2017). The language-specific use of F0 rise in speech segmentation by listeners of Taiwanese Southern Min. Oral presentation at *ILAS Workshop on Phonetics and Phonology*, Academia Sinica, Taipei, October 23–24.
- 11. Ou, S.-C., & **Guo**, **Z.-C.** (2017). Is the cue of pitch rise to spoken word segmentation used in a language-specific or cross-linguistic way? A study of listeners of Taiwanese Southern Min. Oral presentation at the *Phonetics and Phonology in Europe 2017*, Cologne, Germany, June 12–14.
- 12. Ou, S.-C., & **Guo**, **Z.-C.** (2016). The use of lexical tone in spoken word segmentation by Taiwanese Southern Min listeners. Oral presentation at the *24th Annual Conference of the International Association of Chinese Linguistics*, Beijing, China, July 17–19.
- 13. **Guo, Z.-C.** (2014). Perception of articulatorily different Mandarin retroflexes by Japanese speakers: A pilot study. Oral presentation at the 2nd NTU Postgraduate Conference on Teaching Chinese as a Second Language, National Taiwan University, Taipei, March 29.

## **Research Experience**

#### Graduate Research Assistant

2022 -

Assistant for Neural Speech Decoding project (full-time: Jul – Aug 2022; PIs: Jun Wang & David Harwath)

Department of Computer Science, UT Austin

### Graduate Student Lab Member

2018 –

UTSoundLab (PI: Rajka Smiljanic) Department of Linguistics, UT Austin

Research Assistant 2013 – 2018

Assistant (full-time: 2017-2018; part-time: 2013-2017) for NSYSU Phonetics and Phonology Lab (PI:

Shu-chen Ou)

Department of Foreign Language and Literature, NSYSU

## **Teaching Assistantships**

### At UT Austin:

Exploring Accents, by Scott Myers (Fall 2020)

Introduction to the Study of Language, by Nora England (Spring 2019)

Sound Patterns: Sound to Word, by Megan Crowhurst (Fall 2018, Spring 2021) and Scott Myers (Fall 2019; Spring 2020, Fall 2021, Spring 2022)

### At NSYSU:

Phonetics, by Shu-chen Ou (Fall 2015, Fall 2016)

Phonology in English Language Teaching and Learning, by Shu-chen Ou (Spring 2016)

Introduction to English Linguistics (I), by Shu-chen Ou (Fall 2015)

English Writing I, by Shu-chen Ou (Fall 2016, Spring 2016)

General English: Intermediate, by Shu-chen Ou (Fall 2016, Spring 2016)

## **Professional Service**

### **Conferences/workshops:**

Conference co-organizer

2019 - 2020

The 19th Meeting of the Texas Linguistics Society (Feb 14–15, 2020)

### Co-lecturer of Workshop on Speech Perception Experiments

2015

Led hands-on tutorial on designing perceptual experiments using E-Prime 2.0 (National Chengchi University, Oct 30, 2015)

Last update: Sep. 6, 2022

### **Invited journal reviewer:**

Language and Speech JASA Express Letters Quarterly Journal of Experimental Psychology

## **Technical Skills**

Programming languages Python, R/R Markdown Phonetic analysis Praat/Praat scripting

Experiment builders E-Prime 2.0/3.0, PsychoPy, Experiment Builder, Gorilla, Paradigm

Eye-tracker EyeLink Portable Duo Statistical software SPSS, SAS, MATLAB Audio editor Audacity, GoldWave

## Languages

Taiwan Mandarin Native
Taiwanese Southern Min Native
English Proficient
Japanese Beginner