

Yi-Fang Cheng

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EDUCATION

Purdue University

West Lafayette, IN, USA

Ph.D. in Linguistics, Graduate Certificate in Applied Statistics, MA in Linguistics

Aug. 2022 – May 2027 (Exp.)

- Dissertation: The time course of cross-linguistic interference in code-switching: from acoustic evidence to neural embeddings
- MA Thesis: The role of phonetic awareness in modulating bilingual cross-linguistic phonetic interaction: Evidence from code-switching
- Committee: Dr. Daniel J. Olson (chair), Dr. Olga Dmitrieva, Dr. Atsushi Fukada, Dr. Elsayed Issa
- Purdue Bilingualism Lab. Advised by Prof. Daniel J. Olson

National Taiwan Normal University

Taipei, Taiwan

BA in English, BM in Music

Sep. 2017 – Jun. 2022

RESEARCH INTERESTS

Phonetics, Bilingualism, Code-switching, Human–AI Interaction, Computational and Quantitative Methods

RESEARCH EXPERIENCE

Purdue Bilingualism Lab

West Lafayette, IN, USA

Research Assistant

Jan. 2025 –

NSF National Innovation Corps

Remote

Entrepreneurial Lead

Jun. 2025 - Jul. 2025

- Led a seed-stage EdTech startup, securing \$50,000 in funding to develop PadagoTalk, an AI-powered speech-based chatbot for immersive second-language learning
- Conducted 100+ interviews across the language education ecosystem to understand user needs, perceptions of AI-assisted learning, and concerns around bias and pedagogical impact

The Data Mine

West Lafayette, IN, USA

Graduate Data Science Researcher, Reported to Knudsen Institute

Aug. 2024 - Dec. 2024

- Project: Training LLMs within Manufacturing
- Designed and implemented data pipelines to scrape, clean, and preprocess manufacturing text data for LLM training

Graduate Data Science Researcher, Reported to C-SPAN

Jan. 2024 - May. 2024

- Project: Analysis of Rhetoric on Capitol Hill
- Processed and analyzed congressional speech data to quantify political polarization, using pitch and emotional intensity as metrics
- Employed Bash scripting, Praat scripting, Whisper API, and the Parselmouth library for advanced audio analysis

Purdue Bilingualism Lab

West Lafayette, IN, USA

Research Assistant

Aug. 2022 – Jan. 2023

- Project: Cross-linguistic Interference and Code-switching Typology
- Analyzed and annotated English and Korean speech data to extract acoustic features

PUBLICATIONS

- [1] (Under Review) Cross-linguistic phonetic interference in spontaneous code-switching speech: A corpus-based analysis from the SEAME corpus. **Cheng, Y.-F.**, & Olson, D. J. *Corpus Linguistics and Linguistic Theory*.
- [2] (In revision) Phonetic outcomes in Mandarin–English code-switching: Exploring the role of orthographic depth. **Cheng, Y.-F.**, & Olson, D. J. *Phonetica*.
- [3] **Cheng, Y.-F.**, & Olson, D. J. (2025). The effect of metalinguistic awareness on second language phonetic acquisition. In J. M. Levis, M. Duris, S. Sonsaat-Hegelheimer, I. Na (Eds.), *Proceedings of the 15th Pronunciation in Second Language Learning and Teaching Conference* (pp. 1-12). Iowa State University, September 2024. <https://doi.org/10.31274/psllt.18454>

PROJECTS IN PROGRESS

- [1] Human Perception of Human Deepfakes. **Cheng, Y.-F.**, & Issa, Elsayed
- [2] The time course of cross-linguistic interference: evidence from pre-switch anticipation and post-switch persistence. **Cheng, Y.-F.**, & Olson, D. J.
- [3] Short-Term Phonetic Interference and Orthographic Depth: Code-Switching Cued by Logographic and Phonological Representations **Cheng, Y.-F.**, Olson, D. J, & Jiang, Yiyi

CONFERENCE PRESENTATIONS

- [1] **Cheng, Y.-F.**, & Olson, D. J. (2026). Corpus-Based Study of Spontaneous Mandarin-English Code-Switching Speech. Paper presented at 2026 Linguistic Society of America (LSA) Annual Meeting. January 11. (Scheduled)
- [2] **Cheng, Y.-F.**, & Olson, D. J. (2025). *Asymmetrical phonetic outcome in a large Mandarin-English spontaneous speech corpus*. Paper presented at 2025 Purdue Linguistics Symposium. April 12.
- [3] **Cheng, Y.-F.**, & Olson, D. J. (2024). *Phonetic Awareness and Phonetic interference in code-switching among Bilinguals*. Paper presented at UIC Bilingualism Forum 2024. October 24.
- [4] **Cheng, Y.-F.**, & Olson, D. J. (2024). *The effect of phonetic awareness on second language phonetic acquisition*. Paper presented at 15th Annual Pronunciation in Second Language Learning and Teaching (PSLLT). September 13.
- [5] **Cheng, Y.-F.**, & Olson, D. J. (2024). *The role of phonetic awareness in modulating bilingual cross-linguistic interaction: Evidence from code-switching*. Paper presented at 2024 Purdue Linguistics Symposium. April 12.
- [6] Seo, Y., Olson, D. J., & **Cheng, Y.-F.** (2023). *Phonetic interference in bilingual speech: the role of code-switching typology*. Paper presented at Bilingualism Matters Research Symposium (BMRS 2023). October 20.
- [7] Seo, Y., Olson, D. J., & **Cheng, Y.-F.** (2023). *Cross-linguistic interference in second language vowels: Evidence from code-switching*. Paper presented at 14th Annual Pronunciation in Second Language Learning and Teaching (PSLLT). September 7.

TEACHING

Purdue University

West Lafayette, IN, USA

Department of Linguistics, School of Interdisciplinary Studies

Aug. 2024 - Present

- Fundamentals of Phonology and Morphology, LING 311 (Fall 2025)
- Introduction to Linguistics, LING 201 (Fall 2024, Spring 2025)

Department of East Asian Languages and Cultures, School of Languages and Cultures

Jan. 2023 - Aug. 2024

- Chinese, CHNS 101 (Fall 2023)
- Chinese- Distance Learning, CHNS DIST 101 (Summer 2023, Summer 2024)
- Chinese, CHNS 102 (Spring 2023, Spring 2024)

SKILLS

Languages: Python, R, SAS, SQL, Bash

Frameworks & Tools: PyTorch, Praat

DevOps: Git, Docker