

MINGYUE HUO 霍明月 /mɪŋɥœ xuo/

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EDUCATION

University of Illinois Urbana-Champaign

PhD in Linguistics (GPA: 4.0/4.0)

Urbana, IL

May 2027 (expected)

MA in East Asian Languages and Cultures (GPA: 4.0/4.0)

May 2022

Shanghai International Studies University

BA in Japanese (GPA: 3.85/4.0)

Shanghai, China

June 2020

Hosei University

Exchange

Tokyo, Japan

Aug 2018 – Jan 2019

RESEARCH INTERESTS

speech intelligibility, source separation, target speech extraction, speech synthesis, keywords spotting

PUBLICATIONS

Beyond Speaker Identity: Text Guided Target Speech Extraction

Mingyue Huo, Abhinav Jain, Cong Phuoc Huynh, Fanjie Kong, Pichao Wang, Zhu Liu, Vimal Bhat

ICASSP 2025 [\[PDF\]](#) [\[Demo\]](#)

Iterative Nash Policy Optimization: Aligning LLMs with General Preferences via No-Regret Learning

Yuheng Zhang, Dian Yu, Baolin Peng, Linfeng Song, Ye Tian, Mingyue Huo, Nan Jiang, Haitao Mi, Dong Yu

ICLR 2025

Release from Same-talker Speech-on-speech Masking: Effects of Masker Intelligibility and Other Contributing Factors

Mingyue Huo, Yinglun Sun, Dan fogerty, Yan Tang

Journal of the Acoustical Society of America, 2024 [\[PDF\]](#)

Quantifying Informational Masking due to Masker Intelligibility in Same-talker Speech-in-speech Perception

Mingyue Huo, Yinglun Sun, Dan fogerty, Yan Tang

INTERSPEECH 2023 [\[PDF\]](#)

Towards Automating the Assessment of Teachers' Teaching Emotions in Preschool Classrooms

Mingyue Huo, Yan Tang

20th International Congress of Phonetic Sciences (ICPhS) 2023 [\[PDF\]](#)

PRESENTATIONS

Aligning Speech-Hum Pairs using Dynamic Time Warping

Mingyue Huo, Yan Tang

Midwest Speech and Language Days (MSLD) 2024, University of Michigan, Ann Arbor

What makes listening comprehension difficult?: A feature-based machine learning approach to understanding item difficulty

Huiying Cai, Yulin Pan, Ping-lin Chuang, Mingyue Huo, Xun Yan

Language Testing Research Colloquium (LTRC) 2024, Innsbruck, Austria

Constructing a Phonetically-Balanced Low-Predictable Speech Corpus for Mandarin Chinese

Mingyue Huo, Yan Tang

28th Midcontinental Phonetics and Phonology Conference (MidPhon28), 2023, Purdue University

Using Praat Scripts for Data Processing and Annotation

Phonetics and Phonology Lab Workshop, 2022, UIUC

INDUSTRY EXPERIENCE

Applied Scientist Intern at Amazon Prime Video

Summer 2024, Seattle, WA

- Developed a text-guided speech extraction model, integrating audio and text clues to enhance target speech extraction without traditional audio identifiers. Paper submitted to ICASSP 2025.
- Created and evaluated the model using a newly extended dataset featuring speech mixture – text description pairs. Average improvement in SI-SDR is 16 dB.

Linguist Intern at ByteDance (TikTok) AI-Lab

Dec 2019 – July 2021, Shanghai, China

- Developed datasets for Mandarin and Japanese Text-to-Speech and Singing Synthesis AI models, designed annotation pipelines, G2P rules, and created test sets.
- Evaluated AI models, providing feedback using Mean Opinion Score and A/B testing to refine synthesis naturalness and expressiveness.
- Provided Python scripts for speech collection, text normalization, and audio segmentation; enhanced interdisciplinary collaboration with musicians and visual professionals to improve AI model development.

AWARDS

- C.W. Kim Research Award in Linguistics – UIUC May 2024
- Linguistics Student Leadership Award – UIUC May 2024
- Midwest Speech and Language Days Travel Award – University of Michigan April 2024
- Departmental Conference Travel Award – UIUC November 2023
- Best Japanese TA – UIUC May 2022
- EALC Summer Research Fellowship – UIUC May 2021
- Teachers Ranked as Excellent by Their Students – UIUC 2021 Fall and 2020 Fall

TEACHING

- **LING402** TA, Tools and Tech Speech and Language Processing 2022 FA, 2024 FA
- **LING406** TA, Introduction to Computational Linguistics 2023 SP
- **LING446** TA, Fundamentals for Speech Signal Processing and Analysis 2023 SP, 2024 SP
- **JAPN201** Lecturer, Elementary Japanese I 2020 FA, 2021 FA
- **JAPN202** Lecturer, Elementary Japanese II 2021 SP, 2022 SP

COMMUNITY SERVICE

- **Co-chair** at Illinois Language And Linguistics Society 16 (ILLS16) March 2024
- **Student Volunteer** at NeurIPS 2023 December 2023
- **Reviewer** at Illinois Language And Linguistics Society 15 (ILLS15) March 2022
- **Student Volunteer** at INTERSPEECH 2021 August 2021

SKILLS

- **Language:** Mandarin (Native), English (Advanced), Japanese (Advanced N1), Cantonese (Beginner)
- **Software:** Praat, Audacity, Adobe Audition, Adobe Premiere, Montreal Forced Aligner
- **Programming:** Python, MATLAB, Shell, R, \LaTeX
- **Framework & Library:** PyTorch, HTK, Kaldi, NumPy, SciPy, Torchaudio, librosa, soundfile, Matplotlib
- **Highlighted Coursework:** Digital Signal Processing (A+), Optimization (A), Psychoacoustics (A), Phonetics (A+), Phonology (A), Formal Semantics (A+), Machine Learning (A), Natural Language Processing (A)

Last Updated on Jan.23 2025