Xuanda Chen

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⌂ https://superjo2.github.io

EDUCATION

McGill University — Montreal, Canada
Ph.D. in Linguistics — *Excepted 2025*
Research Interests: Speech Prosody, Speech Perception, Computational Linguistics

Chinese Academy of Social Sciences — Beijing, China
M.A. in Linguistics & Speech Science — *2020*
Dissertation: Speech Assessment and Automatic Annotation for L2 English Prosody
Advisor: Prof. Aijun Li & Prof. Ziyu Xiong

University of California, Berkeley — CA, US
Visiting Student in Cognitive Science & Electrical Engineering — *2019*

University of Science and Technology of China — Hefei, China
Visiting Student in Electrical Engineering & Infomation Science — *2018*
Advisor: Prof. Zhen-Hua Ling

Anhui University — Hefei, China
B.A. with honors in English Linguistics — *2017*
Advisor: Prof. Jian Hu

PROFESSIONAL EXPERIENCE

ByteDance, AI Lab — Beijing, China
Research Intern — *May 2020 – Oct 2020*

- Responsible for a large speech dataset construction up to 60 hours with prosodic annotation in ToBI.
- Co-designed a Praat-based platform for prosody annotation with automatic quality audit and error correction.
- Worked with the linguist team and the TTS team researching on controllable TTS. Successfully implemented Tacotron-based synthesis system, and the intonation of the generated speech can be conditioned on the ToBI tokens.

University of Science and Technology of China — Hefei, China
Graduate Researcher — *Sep 2018 – Jan 2019*

- Advisor: Prof. Zhenhua Ling
- Co-built a large speech dataset covering over 13 dialectal regions in China, and made Python-based inquiring and analyzing tools and interface featuring segment searching and instant data visualization.
- Optimized the Praat-based platform for speech prosody annotation in ToBI. Designed state-of-the-art neural network models of the day for automatic ToBI annotation and prosodic structure evaluation.

AISpeech, AI Lab — Suzhou, China
Research Intern — *Oct 2016 – May 2017*

- Worked with colleagues in the TTS group to research, design and created solutions for detecting errors in phonetic annotation in Mandarin and Shanghainese on crowd-sourced speech datasets.
- Coordinated with an outsourcing annotation team, provided prosody labelling guidance, and performed supplier quality audit using self-developed scoring tools and procedures.
- Co-maintained TTS pipelines adapting for new speakers. Responsibilities cover speech dataset cleaning, text pre-processing, and ML training workflow maintenance.

SKILLS	**Programming** Python (Numpy, Pandas, Pytorch), R, Praat, LaTeX, Matlab, Bash, JavaScript
	Tools Tmux, Git, macOS, Linux
	Languages English (Fluent), Mandarin (Native)

PUBLICATIONS

1. **Xuanda Chen**, Zhenhua Ling, Ziyu Xiong, and Aijun Li, "Automatic prosodic annotation for l2 speech evaluation," *Speech Communication*, (in submission).
2. Meng Liu, Longbiao Wang, Kong Aik Lee, **Xuanda Chen**, and Jianwu Dang, "Replay-attack detection using features with adaptive spectro-temporal resolution," in *Proceedings of International Conference on Acoustics, Speech and Signal Processing*, IEEE, 2021, pp. 6374–6378.
3. **Xuanda Chen**, Yuan Jia, and Ziyu Xiong, "Measuring prosodic transfer in vector space by weighted tonal events," in *11th International Symposium on Chinese Spoken Language Processing*, IEEE, 2018, pp. 220–224.
4. **Xuanda Chen**, Ziyu Xiong, and Jian Hu, "The trajectory of voice onset time with vocal aging," in *Proceedings of Interspeech*, IEEE, 2018, pp. 1556–1560.
5. Jian Hu, **Xuanda Chen**, and Qingyu Wu, "An empirical case study of children's perception and production of stop consonants (in Chinese)," *Proceedings of Hefei University*, vol. 34, no. 6, pp. 139–144, 2017.

PRESENTATION

- **Xuanda Chen**, Qingyu Wu, and Jian Hu. The Dialect Effect on English Stop Acquisition Between Mandarin and Wu Children. The Phonectic Conference of China, 2016. [Best Student Paper]

AWARDS

• The First-class Scholarship, Anhui University	*2015*
• Best Student Paper of Phonetic Conference of China 2016	*2016*
• Outstanding Graduate of Anhui University	*2017*
• Linguistic Institute of China Scholarship, Commercial Press	*2017*
• The First-class Scholarship, University of Chinese Academy of Social Sciences	*2018, 2019*
• The National Scholarship, University of Chinese Academy of Social Sciences	*2019*
• Graduate Excellence Award, McGill University	*2020*