

Ye-Xin Lu | 鲁叶欣

Phone: (+86) 18226746417 | Email: yxlu0102@mail.ustc.edu.cn

Homepage: <https://yxlu-0102.github.io/>

Education

Eng.D Student in Communication Engineering

2021.09 – 2026.06 (Expected)

School of Information Science and Technology, University of Science and Technology of China

Hefei, Anhui, China

- ✧ Thesis: Research on robust and controllable personalized speech synthesis in acoustic environments (Expected)
- ✧ Supervised by Prof. Zhen-Hua Ling
- ✧ GPA: 3.40/4.3

B.E. degree in Electronic Information Engineering

2017.08 – 2021.06

School of the Gifted Young, University of Science and Technology of China

Hefei, Anhui, China

- ✧ Thesis: Property analysis of pre-trained acoustic representations
- ✧ GPA: 3.14/4.3

Selected Publications

Journal

- [1] **Ye-Xin Lu**, Yang Ai, Hui-Peng Du, Zhen-Hua Ling, “Towards high-quality and efficient speech bandwidth extension with parallel amplitude and phase prediction”, *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 33, pp. 236-250, 2025.
- [2] **Ye-Xin Lu**, Yang Ai, Zhen-Hua Ling, “Explicit estimation of magnitude and phase spectra in parallel for high-quality speech enhancement”, submitted to *Neural Networks* (revise and accept).
- [3] Yang Ai, Xiao-Hang Jiang, **Ye-Xin Lu**, Hui-Peng Du, Zhen-Hua Ling, “APCodec: A neural audio codec with parallel amplitude and phase spectrum encoding and decoding”, *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 32, pp. 3256-3269, 2024.
- [4] Yang Ai, **Ye-Xin Lu**, Zhen-Hua Ling, “Long-frame-shift neural speech phase prediction with spectral continuity enhancement and interpolation error compensation”, *IEEE Signal Processing Letters*, vol. 30, pp. 1097-1101, 2023.

Conference

- [1] **Ye-Xin Lu**, Hui-Peng Du, Zheng-Yan Sheng, Yang Ai, Zhen-Hua Ling, “Incremental disentanglement for environment-aware zero-shot text-to-speech synthesis”, in *Proc. ICASSP*, 2025, accepted.
- [2] **Ye-Xin Lu**, Yang Ai, Zheng-Yan Sheng, Zhen-Hua Ling, “Multi-stage speech bandwidth extension with flexible sampling rate control”, in *Proc. INTERSPEECH*, 2024, pp. 2270-2274.
- [3] **Ye-Xin Lu**, Yang Ai, Zhen-Hua Ling, “MP-SENet: A speech enhancement model with parallel denoising of magnitude and phase spectra”, in *Proc. INTERSPEECH*, 2023, pp. 3834-3838.
- [4] **Ye-Xin Lu**, Yang Ai, Zhen-Hua Ling, “Source-filter-based generative adversarial neural vocoder for high fidelity speech synthesis”, in *Proc. National Conference on Man-Machine Speech Communication*, 2022, pp. 68-80.
- [5] Yang Ai, **Ye-Xin Lu**, Xiao-Hang Jiang, Zheng-Yan Sheng, Rui-Chen Zheng, Zhen-Hua Ling, “A low-bitrate neural audio codec framework with bandwidth reduction and recovery for high-sampling-rate waveforms”, in *Proc. INTERSPEECH*, 2024, pp. 1765-1769.
- [6] Hui-Peng Du, **Ye-Xin Lu**, Yang Ai, Zhen-Hua Ling, “BiVocoder: A bidirectional neural vocoder integrating feature extraction and waveform generation”, in *Proc. INTERSPEECH*, 2024, pp. 3894-3898.

Honors

- ✧ USTC Outstanding Student Scholarship (Grade 3) 2019.12 & 2020.12
- ✧ USTC Strive Student Scholarship 2019.12 & 2020.12
- ✧ USTC Outstanding Freshman Scholarship (Grade 1) 2017.12

Language – Chinese/English

- ✧ National College English Test (CET) Band 6: 516 2018.11