

EDUCATION

🎓 **09/2024 - today**, **Ph.D. student** in Information and Communication Engineering

IASP, School of Electronic Information, Wuhan University (WHU), China.

Advisor: Prof. Gongping Huang

Major Research Fields: Speech Enhancement, Microphone Array Signal Processing

🎓 **09/2022 - 06/2024**, **Master student** in Computer Science and Technology

School of Computer Science, Wuhan University, China.

Major Research Fields: Speech Quality Evaluation, Lombard Effect in Speech

🎓 **09/2018 - 06/2022**, **B.Sc.** in Software Engineering

Software College of Northeastern University (NEU), China.

PUBLICATIONS

PEER-REVIEWED CONFERENCE PROCEEDINGS

- [1] **H. Pei**, G. Huang, J. Jin, J. Ma, Z. Wu, J. Chen, and J. Benesty, "Data-driven white noise gain constrained robust superdirective beamformer for speech enhancement," in *Proc. IEEE ICASSP*, pp. 1–5, 2025.
- [2] **H. Pei**, K. Chen, G. Huang, J. Jin, J. Benesty, and J. Chen, "On the design of Low-Rank differential beamformers with nonuniform linear microphone arrays," in *Proc. IEEE ICASSP*, pp. 1–5, 2025.
- [3] **H. Pei**, Y. Yang, X. Chen, Q. Liu, H. Chen, W. Tu, and S. Lin, "PMMSD: development of the matrix sentence intelligibility dataset for mandarin with lombard effect," in *Proc. IEEE ICASSP*, pp. 1–5, 2023.
- [4] T. Zheng, **H. Pei**, N. Pan, J. Jin, G. Huang, J. Chen, and J. Benesty, "A single-input/binaural-output perceptual rendering based speech separation method in noisy environments," in *2024 APSIPA ASC*, pp. 1–5, IEEE, 2024.
- [5] Y. Zhang, **H. Pei**, W. Wang, and G. Huang, "LMFCA-Net: a lightweight model for multi-channel speech enhancement with rfficient narrow-band and cross-band attention," in *Proc. IEEE ICASSP*, pp. 1–5, 2025.

SELECTED PRIZES AND AWARDS

- WHU Outstanding Student and the First Prize Scholarship, in **12/2023**.
- NEU Outstanding Graduate Students Awards, in **06/2022**.

OTHER ACTIVITIES IN THE PROFESSION

- **Student member** of IEEE, IEEE SPS.
- **Reviewer** for scientific journals:
 - *IEEE/ACM Transactions on Audio, Speech, and Language Processing*;
 - *IEEE Signal Processing Letters*;
 - *Circuits, Systems and Signal Processing*;
 - *Chinese Journal of Electronics*.