YUFENG YANG

470-419-1889 ◇ yang.5662@osu.edu ◇ yfyangseu.github.io ◇ linkedin.com/in/yufeng-yang-osu

SUMMARY

PhD candidate in CSE at The Ohio State University with 5+ years of research experience in robust ASR and multi-channel speech modeling. Former Research Scientist Intern at Meta, MERL, and MSR Asia, with a focus on multi-channel ASR, speech foundation models, and their application on wearables.

EDUCATION

The Ohio State University - Columbus, OH 2026 (expected)
Advisor: Prof. DeLiang Wang
Ph.D. candidate, Computer Science and Engineering

Georgia Institute of Technology - Atlanta, GA 2020
M.S., Electrical and Computer Engineering

Southeast University - Nanjing, China 2018
B.E., Information Engineering

INDUSTRY RESEARCH EXPERIENCE

Research Scientist Intern Meta
May - August 2025 Menlo Park, CA, USA

- Proposed multi-channel differential ASR for smart glasses, improving robustness of wearer speech recognition in real-world scenarios against side-talk
- Integrated complementary frontends for on-device streaming ASR without increasing latency
- Demonstrated that the proposed system outperforms the internal baseline with up to 18% relative WER reduction under streaming and on-device Bluetooth bandwidth constraints
- Resulted in a first-authored paper under review

Research Scientist Intern Meta
May - August 2024 Menlo Park, CA, USA

- Proposed M-BEST-RQ, a novel array-agnostic multi-channel speech foundation model for smart glasses
- Demonstrated that the model trained on one device can work across different wearable devices on conversational ASR, source localization, and wearer VAD
- With only 8 hours of labeled speech for fine-tuning, the proposed model achieves a 3% absolute WER reduction over a baseline trained on 2k hours of labeled data for conversational ASR, demonstrating strong label efficiency
- Resulted in a first-authored paper accepted to ICASSP 2025.

Research Intern Mitsubishi Electric Research Laboratories
May - August 2023 Cambridge, MA, USA

- Developed unsupervised source separation methods leveraging self-supervised learning representations for multi-talker scenarios
- Evaluated separation quality and representation transfer across different acoustic conditions

Research Intern Microsoft Research Asia
May - August 2019 Beijing, China

- Developed and evaluated models for overlapped speech detection and speaker separation in conversational scenarios

SELECTED PUBLICATIONS

Yufeng Yang, Yiteng Huang, Yong Xu, Li Wan, Suwon Shon, Yang Liu, Yifeng Fan, Zhaojun Yang, Olivier Siohan, Yue Liu, Ming Sun, and Florian Metze, "Multi-channel differential ASR for robust wearer speech recognition on smart glasses," *arXiv:2509.14430*, 2025. (*Under Review*)

Yufeng Yang, Desh Raj, Ju Lin, Niko Moritz, Junteng Jia, Gil Keren, Egor Lakomkin, Yiteng Huang, Jacob Donley, Jay Mahadeokar, and Ozlem Kalinli, "M-BEST-RQ: A Multi-channel speech foundation model for smart glasses," in *Proc. IEEE ICASSP*, 2025, 5 pages.

Yufeng Yang, Ashutosh Pandey, and DeLiang Wang, "Towards decoupling frontend enhancement and backend recognition in monaural robust ASR," *Computer Speech & Language*, 101821, 2025.

Yufeng Yang, Hassan Taherian, Vahid Ahmadi Kalkhorani, and DeLiang Wang, "Elevating robust ASR by decoupling multi-channel speaker separation and speech recognition," in *Proc. IEEE ICASSP*, 2025, 5 pages.

Yufeng Yang, Ashutosh Pandey, and DeLiang Wang, "Time-domain speech enhancement for robust automatic speech recognition," in *Proc. Interspeech*, 2023, pp. 4913-4917.

OTHER PUBLICATIONS

Heming Wang, **Yufeng Yang**, and DeLiang Wang, "A speech prediction model based on codec modeling and Transformer decoding," *Computer Speech & Language*, 101892, 2025.

Yufeng Yang, Hassan Taherian, Vahid Ahmadi Kalkhorani, and DeLiang Wang, "Elevating multi-talker robust ASR by decoupling speaker separation and speech recognition," *arXiv:2503.17886*, 2025.

Yufeng Yang, Peidong Wang, and DeLiang Wang, "A Conformer based acoustic model for robust automatic speech recognition," *arXiv:2203.00725*, 2022.

Desmond Caulley, **Yufeng Yang**, and David Anderson, "EACELEB: An east Asian language speaking celebrity dataset for speaker recognition," *arXiv:2203.05333*, 2022.

Chuan Zhang*, **Yufeng Yang*** (**co-first**), Shunqing Zhang, Zaichen Zhang, and Xiaohu You, "Residual-based detections and unified architecture for massive MIMO uplink," *Journal of Signal Processing Systems*, vol. 91, pp. 1039-1052, 2019.

Yufeng Yang, Wence Zhang, Jiejun Jin *et al.*, "Efficient compressed Landweber detector for massive MIMO," in *Proc. IEEE SiPS*, 2018, pp. 65-70.

Yufeng Yang, Ye Xue, Xiaohu You, and Chuan Zhang, "An efficient conjugate residual detector for massive MIMO systems," in *Proc. IEEE SiPS*, 2017, pp. 1-6.

TECHNICAL SKILLS

Programming: Python, Bash, C++, MATLAB, LaTeX
Frameworks: PyTorch, TensorFlow, Kaldi, ESPnet, NeMo, SpeechBrain, TorchAudio

HONORS & AWARDS

National Scholarship (Top 0.2%), Ministry of Education, China, 2015
Meritorious Winner (Top 5%), Interdisciplinary Contest in Modeling (ICM) 2016
Leike Scholarship, Southeast University 2016