

Jiawei Du

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EDUCATION

National Taiwan University

M.S. in Computer Science and Information Engineering, GPA 4.03/4.3

Taipei, Taiwan

Sep. 2022 - Jun. 2025

- Interests: Anti-spoofing, Neural Audio Codec and Audio Centric Multimodal LLM
- Supervised by Prof. [Jyh-Shing Roger Jang](#) and work intensively with Prof. [Hung-yi Lee](#)
- Ranked 1/189 in the department in the 2023/24 academic year

Ming Chuan University

B.S. in Information and Telecommunications Engineering, GPA 3.98/4.0

Taoyuan, Taiwan

Sep. 2018 - Jun. 2022

- Cumulatively ranked 1/79 in the department, with 6 academic scholarships

Shanghai Jiao Tong University

Exchange Student in Computer Science and Technology

Shanghai, China

Sep. 2020 - Jan. 2021

PUBLICATIONS

- **J. Du***, X. Chen*, H. Wu, L. Zhang, I.M. Lin, I.H. Chiu, W. Ren, Y. Tseng, Y. Tsao, J.S.R. Jang, and H.Y. Lee, "CodecFake-Omni: A Large-Scale Codec-based Deepfake Speech Dataset," *IEEE Transactions on Pattern Analysis and Machine Intelligence* ([Submitted to TPAMI 2025](#))
- **J. Du***, X. Chen*, H. Wu, J.S.R. Jang, and H.Y. Lee, "Neural Codec-based Adversarial Sample Detection for Speaker Verification," *ISCA Proc. Interspeech 2024* ([Poster at Interspeech 2024](#))
- **J. Du***, I.M. Lin*, I.H. Chiu*, X. Chen, H. Wu, W. Ren, Y. Tsao, et.al, "DFADD: The Diffusion and Flow-Matching Based Audio Deepfake Dataset," *2024 IEEE Spoken Language Technology Workshop* ([Poster at SLT 2024](#))
- H. Wu, **J. Du***, X. Chen*, Y.C. Lin*, K.W. Chang*, K.H. Lu*, A.H. Liu*, H.L. Chung*, Y.K. Wu*, D. Yang*, S. Liu, Y.C. Wu, X. Tan, J. Glass, S. Watanabe, and H.Y. Lee, "Codec-SUPERB@ SLT 2024: A lightweight benchmark for neural audio codec models," *2024 IEEE Spoken Language Technology Workshop* ([Poster at SLT 2024](#))
- H. Wu*, H.C. Chou*, K.W. Chang, L. Goncalves, **J. Du**, et al., "Open-Emotion: A Reproducible EMO-SUPERB for Speech Emotion Recognition Systems," *2024 IEEE Spoken Language Technology Workshop* ([Poster at SLT 2024](#))
- H. Wu*, H.C. Chou*, K.W. Chang, L. Goncalves, **J. Du**, J.S.R. Jang, C.C. Lee, and H.Y. Lee, "Empower Typed Descriptions by Large Language Models for Speech Emotion," *2024 Asia Pacific Signal and Information Processing Association Annual Summit and Conference* ([Oral at APSIPA ASC 2024](#))
- H. Wu*, H.C. Chou*, K.W. Chang, L. Goncalves, **J. Du**, J.S.R. Jang, C.C. Lee, and H.Y. Lee, "EMO-SUPERB: An In-depth Look at Speech Emotion Recognition," *arXiv preprint arXiv:2402.13018* ([Preprint 2024](#))
- **J. Du***, C.C. Wang*, and J.S.R. Jang, "Dcase 2023 task 6b: Text-to-audio retrieval using pretrained models," *Detection and Classification of Acoustic Scenes and Events 2023* ([DCASE Tech. Rep 2023](#))

RESEARCH EXPERIENCE

Research Assistant

MIR LAB, National Taiwan University

Taipei, Taiwan

Sep. 2022 - Jun. 2025

- Examined Neural Audio Codec applications in deepfake detection, proposed codec-based synthetic audio as a novel spoofing category, and systematically analyzed and categorized existing Neural Audio Codecs ([paper](#))
- Studied audio-visual deepfake localization and improved the SoTA model UMMAFormer from 13.1% to 75.7% mAP@50 on our private dataset via LoRA tuning
- Led a team to achieve 5.33% EER (ranked 13/49) in the Singing Voice Deepfake Detection Challenge ([results](#))
- Explored audio-text retrieval by VALOR and cross-attention, secured 3rd place in the DCASE Challenge ([results](#))

Research Internship

Speech Team, Samsung Research

Beijing, China

Feb. 2025 - May. 2025

- Conducted research on efficient neural audio coding techniques with high fidelity

SKILLS

Programming Languages: Python, C/C++

ML Libraries & Tools: PyTorch, Numpy, OpenCV, Git, WSL, Linux, LaTeX

Language: Mandarin (native), English (IELTS 6.5)

Services: Reviewer of IEEE SLT 2024, IEEE JSTSP 2024, IJPRAI 2024; Technical committee of Codec-SUPERB