# Yan-Bo Lin

#### Education

Aug. 2021 - Present **Ph.D. Student**, *The University of North Carolina at Chapel Hill, NC, USA*, Department of Computer Science.

Sep. 2017 - Aug. 2019 M.S., National Taiwan University. Taipei, Taiwan,
Graduate Institute of Communication Engineering,
IPPR 2019 Master Thesis Honorable Mention Award
TAAI 2019 Master Thesis Honorable Mention Award.
GPA – 4.02/4.3

Sep. 2013 - Jun. 2017 **B.S.**, *National Central University, Taoyuan, Taiwan*, Department of Computer Science, Undergraduate Research First Prize.

GPA - 3.89/4 (89.45/100), Rank - 7/120

#### Publications

- arXiv 2024 **Yan-Bo Lin** and Gedas Bertasius. *Siamese Vision Transformers are Scalable Audio-visual Learners*. arXiv, 2024.
- CVPR 2023 **Yan-Bo Lin**, Yi-Lin Sung, Jie Lei, Mohit Bansal, and Gedas Bertasius. *Vision Transformers* are *Parameter-Efficient Audio-Visual Learners*. In IEEE Conference on Computer Vision and Pattern Recognition, 2023.
- CVIU 2023 **Yan-Bo Lin**, Hung-Yu Tseng, Hsin-Ying Lee, Yen-Yu Lin, and Ming-Hsuan Yang. *Unsuper-vised Sound Localization via Iterative Contrastive Learning*. Invited paper at CVPRW 2021. Computer Vision and Image Understanding, 2023.
- ECCV 2022 Oral **Yan-Bo Lin**, Jie Lei, Mohit Bansal, and Gedas Bertasius. **ECLIPSE: Efficient Long-range Video Retrieval using Sight and Sound**. In European Conference on Computer Vision, 2022.
  - NeurIPS 2021 Yan-Bo Lin, Hung-Yu Tseng, Hsin-Ying Lee, Yen-Yu Lin, and Ming-Hsuan Yang. *Exploring Cross-Video and Cross-Modality Signals for Weakly-Supervised Audio-Visual Video Parsing*. Advances in Neural Information Processing Systems, 2021.
    - AAAI 2021 **Yan-Bo Lin** and Yu-Chiang Frank Wang. *Exploiting Audio-Visual Consistency with Partial Supervision for Spatial Audio Generation*. In AAAI Conference on Artificial Intelligence, 2021.
    - ACCV 2020 Yan-Bo Lin and Yu-Chiang Frank Wang. Audiovisual Transformer with Instance Attention for Audio-Visual Event Localization. In Asian Conference on Computer Vision, 2020.
    - ICCV 2019 Yu-Jhe Li, Ci-Siang Lin, **Yan-Bo Lin**, and Yu-Chiang Frank Wang. *Cross-Dataset Person Re-Identification via Unsupervised Pose Disentanglement and Adaptation*. In IEEE International Conference on Computer Vision, 2019.
  - ICASSP 2019 **Yan-Bo Lin**, Yu-Jhe Li, and Yu-Chiang Frank Wang. *Dual-modality seq2seq network for audio-visual event localization*. In IEEE International Conference on Acoustics, Speech and Signal Processing, 2019.
    - IDA 2017 Tuan Pham, Yuan-Shan Lee, **Yan-Bo Lin**, Tzu-Chiang Tai and Jia-Ching Wang. **Single channel source separation using graph sparse NMF and adaptive dictionary learning**. In Intelligent Data Analysis, 2017.

## Experience

Feb. 2024 - Present Student Researcher, Microsoft, Remote.

Multimodal generation

May. 2023 - Nov.2023 Research Intern, ByteDance Inc., CA, USA. Mentors: Dr. Heng Wang, Dr. Linjie Yang, and Dr. Yu Tian Project: Scaling Video-to-Music Generation using Web Video Data Aug. 2021 - Present Graduate Research Assistant., The University of North Carolina at Chapel Hill, NC, USA. Advisor: Prof. Gedas Bertasius • Project: Long-term video understanding with multimodal data. Project: Efficient audio-visual adaptation for audio-visual tasks. Aug. 2020 - Jul. 2021 Vision and Learning Lab, National Chiao Tung University, Hsinchu, Taiwan. Research Assistant. Advisor: Prof. Yen-Yu Lin (NCTU) and Prof. Ming-Hsuan Yang (UC Merced) • Project: Sound localization in self-supervised fashion. Project: Weakly supervised audio-visual video parsing. Aug. 2019 - Jul. 2020 Vision and Learning Lab, National Taiwan University, Taipei, Taiwan. Research Assistant. Advisor: Prof. Yu-Chiang Frank Wang o Project: Exploiting Audio-Visual Consistency with Partial Supervision for Spatial Audio Generation Mar. 2019 - Jun. 2019 **National Institute of Informatics**, *Tokyo, Japan*. Research Intern. Mentor: Dr. Yin-Qiang Zheng Sep. 2017 - Feb. 2019 Vision and Learning Lab, National Taiwan University, Taipei, Taiwan. Student Researcher. Advisor: Prof. Yu-Chiang Frank Wang Project: Cross-Modality Attention for Audio-Visual Event Localization Awarded two master thesis honorable mention awards from IPPR and TAAI respectively. Aug. 2015 - Aug. 2017 Deep Learning and Media System Lab, National Central University, Taoyuan, Taiwan. Undergraduate Research Assistant. Advisor: Prof. Jia-Ching Wang Topic: National Science Council (NSC) research project on blind source separation (BSS). First prize in the undergraduate research project competition. Honors Nov. 2019 Master Thesis Honorable Mention Award Taiwan Association for Artificial Intelligence Aug. 2019 Master Thesis Honorable Mention Award Chinese Image Processing and Pattern Recognition Society Sep. 2016 Excellent Student Scholarship Jun. 2016 Undergraduate Research Project First prize. Aug. 2015 Best paper award, ASE International Conference on Social Informatics. o Tuan Pham, Yuan-Shan Lee, Yan-Bo Lin, Tzu-Chiang Tai, and Jia-Ching Wang. Single Channel Source Separation Using Sparse NMF and Graph Regularization. Sep. 2013 – Jun. 2017 Dean's List Award (three times), Undergraduate at NCU, B.S. in Computer Science. Awarded to students in the CS department with the top 5% GPA each semester o 2016 fall, 2015 spring, and 2014 fall.

## Teaching

Sep. 2018 - Feb. 2019 Teaching Assistant, National Taiwan University, Taipei, Taiwan.

Introduction to Digital Signal Processing.

o Instructor: Prof. Chu-Song Chen.

Mar. 2018 - Jun. 2018 Teaching Assistant, National Taiwan University, Taipei, Taiwan.

Deep Learning for Computer Vision.

o Instructor: Prof. Yu-Chiang Frank Wang.

### Professional Activities

Reviewer AAAI, NeurIPS, ICCV, ECCV, CVPR, TPAMI

Program Committee T4V: Transformers for Vision workshop at CVPR 2022

Program Chair T4V: Transformers for Vision workshop at CVPR 2023