

YE ZHU

Google Scholar
yzhu96@hawk.iit.edu
Homepage

RESEARCH INTERESTS

Computer Vision; Multimodal Learning; Vision, Audio and Language

ACADEMIC EXPERIENCE

Illinois Institute of Technology, USA Ph.D. candidate in Computer Science, advised by Prof. Yan Yan. GPA: 4.0/4.0	January 2021 - Present
Princeton University, USA Visiting Researcher at VisualAI lab, advised by Prof. Olga Russakovsky.	June 2022 - Present
Texas State University, USA (<i>Transferred</i>) Ph.D. in Computer Science, advised by Prof. Yan Yan. GPA: 4.0/4.0	September 2019 - December 2020
Shanghai Jiao Tong University(SJTU), China M.S. in Mechanical Engineering. GPA: 3.72/4.0	September 2016 - March 2019
Ecole Polytechnique(X), France Exchange Master Student in Engineering.	September 2016 - March 2017
Shanghai Jiao Tong University(SJTU), China B.S. in Mechanical and Automation. GPA: 3.63/4.3	September 2012 - August 2016

SELECTED PUBLICATIONS AND PREPRINTS

- [1] Ye Zhu, Yu Wu, Nicu Sebe, and Yan Yan. Vision+X: A Survey on Multimodal Learning in the Light of Data, (arXiv preprint: arXiv:2210.02884), 2022.
- [2] Ye Zhu, Yu Wu, Kyle Olszewski, Jian Ren, Sergey Tulyakov, and Yan Yan. Discrete Contrastive Diffusion for Cross-Modal and Conditional Generation, (arXiv preprint: arXiv:2206.07771), 2022.
- [3] Ye Zhu, Kyle Olszewski, Yu Wu, Panos Achlioptas, Menglei Chai, Yan Yan, and Sergey Tulyakov. Quantized GAN for Complex Music Generation from Dance Videos, in European Conference on Computer Vision (**ECCV**), 2022.
- [4] Ye Zhu, Xiaoguang Zhu, Yuzhang Shang, Zhenhao Zhao, and Yan Yan. Supplementing Missing Visions via Dialog for Scene Graph Generations. (arXiv preprint: arXiv:2204.11143), 2022.
- [5] Ye Zhu, Yu Wu, Yi Yang, and Yan Yan. Saying the Unseen: Video Descriptions via Dialog Agents, in IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2021.
- [6] Ye Zhu, Yu Wu, Hugo Latapie, Yi Yang, Yan Yan. Learning Audio-Visual Correlations From Variational Cross-Modal Generations, in IEEE International Conference on Acoustics, Speech and Signal Processing (**ICASSP**), 2021.
- [7] Xiaoguang Zhu, Ye Zhu, Haoyu Wang, Honglin Wen, Yan Yan, Peilin Liu. Skeleton Sequence and RGB Frame Based Multi-Modality Feature Fusion Network for Action Recognition, in Transactions on Multimedia Computing Communications and Applications (**TOMM**), 2021.

- [8] Ye Zhu, Yu Wu, Yi Yang, and Yan Yan. Describing Unseen Videos via Multi-Modal Cooperative Dialog Agents, in European Conference on Computer Vision (**ECCV**), 2020.
- [9] Ye Zhu, Yan Yan, and Oleg Komogortsev. Hierarchical HMM for Eye Movement Classification, in European Conference on Computer Vision Workshop (**ECCVW**), 2020.
- [10] Y. Zhu, S. Shepstone, P. Martínez-Nuevo, et al. Multiview Based 3D Scene Understanding On Partial Point Sets. (arXiv:1812.01712), 2018.

INDUSTRIAL EXPERIENCE

Snap Inc., Remote, USA

May 2021 - August 2021

Research intern in Computer Vision, advised by Dr. Kyle Olszewski

- Project: Music generation conditioned on dance videos.

Bang & Olufsen, Struer, Denmark

July 2018 - December 2018

Research intern in Computer Vision, advised by Dr. Sven Ewan Shepstone and Dr. Pablo Martinez-Nuevo

- Project: 3D indoor scene understanding via point clouds.

SELECTED HONORS AND AWARDS

CVPR Travel Grant Award	2022
Merrick Merit Fellowship, Texas State University	2019
First Class Academic Excellence Scholarship for Graduate Students of SJTU	2017&2018
Meritorious Winne in Mathematical Contest in Modeling (MCM)	2015
Second Class Academic Excellence Scholarship for Undergraduate Students of SJTU	2015

PROFESSIONAL ACTIVITIES

Conference Reviewer: CVPR, ECCV, AAAI, ACMM, WACV, ICASSP.

Journal Reviewer: TMM, Neurocomputing, Knowledge-Based Systems.

Research Assistant at the Computer Vision and Multimedia Lab, Illinois Institute of Technology 2021-Now

Teaching Assistant for CS4310 Computer Networks, Texas State University 2019&2020

Teaching Assistant for CS4328 Operating Systems, Texas State University 2020

LINGUISTIC SKILLS AND OTHERS

Chinese (Native)

English (TOEFL iBT 106/120, GRE 322+3/340+6)

French (Professional, DALF C1)

Part-time French translator for the European Science Magazine *Science&Vie*