

# YU WU

Professor at School of Computer Science, Wuhan University

Research interest: Multi-modal Learning, Video Understanding, Computer Vision

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## 🎓 EDUCATION

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| <b>Princeton University</b> , Princeton, United States                 | 2021 – 2022 |
| <i>Postdoctoral Research Associate</i> at the Princeton Visual AI Lab. |             |
| <b>University of Technology Sydney</b> , Sydney, Australia             | 2017 – 2021 |
| <i>Ph.D. Degree</i> in Computer Science, advised by Prof. Yi Yang.     |             |
| <b>Shanghai Jiao Tong University</b> , Shanghai, China                 | 2011 – 2015 |
| <i>Bachelor Degree</i> in Mechanical Engineering                       |             |

## 👥 ACADEMIC EXPERIENCE

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| CVPR 2023 Organizing Committee: Workshop Chair | Aug. 2022 |
| CVPR 2023 Area Chair                           | Sep. 2022 |

## 🏆 AWARDS

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| CVPR 2021 Doctoral Consortium ( <i>30 recipients world-wide</i> )                               | Jun. 2021 |
| 1 <sup>st</sup> Place Award in The 3rd Large-scale Video Object Segmentation Challenge @ CVPR21 | May. 2021 |
| Google PhD Fellowship in Computer Vision ( <i>10 recipients world-wide</i> )                    | Oct. 2020 |
| Outstanding Reviewer Award for ECCV   | Jul. 2020 |
| 1 <sup>st</sup> Place Award in CVPR 2020 EPIC-Kitchens Action Recognition Challenge             | Jun. 2020 |
| Travel Grant Award for ICCV 2019  | Oct. 2019 |
| 1 <sup>st</sup> Place Award in CVPR 2019 EPIC-Kitchens Action Recognition Challenge             | Jun. 2019 |
| President's Scholarship in University of Technology Sydney                                      | Jul. 2017 |
| Academic Excellence Scholarship in Shanghai Jiao Tong University                                | 2012-2014 |
| First Prize in National Olympiad Informatics in Province (NOIP)                                 | Nov. 2009 |

## 📖 CONFERENCE PUBLICATIONS

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- Jihoon Chung, **Yu Wu**, Olga Russakovsk. *Enabling Detailed Action Recognition Evaluation Through Video Dataset Augmentation*, in **NeurIPS**, 2022.
- Mengxue Qu, **Yu Wu**, Wu Liu, Qiqi Gong, Xiaodan Liang, Olga Russakovsky, Yao Zhao, Yunchao Wei. *SiRi: A Simple Selective Retraining Mechanism for Transformer-based Visual Grounding*, in **ECCV**, 2022.
- Zeyu Wang, **Yu Wu**, Karthik Narasimhan, Olga Russakovsky. *Multi-query Video Retrieval*, in **ECCV**, 2022.
- Ye Zhu, Kyle Olszewski, **Yu Wu**, Panos Achlioptas, Menglei Chai, Yan Yan, Sergey Tulyakov. *Quantized GAN for Complex Music Generation from Dance Videos*, in **ECCV**, 2022.
- Yadong Ding, **Yu Wu**, Chengyue Huang, Siliang Tang, Yi Yang, Longhui Wei, Yueting Zhuang, Qi Tian. *Learning to Learn by Jointly Optimizing Neural Architecture and Weights*, in **CVPR**, 2022.
- Jiaxu Miao, Xiaohan Wang, **Yu Wu**, Wei Li, Xu Zhang, Yunchao Wei, Yi Yang. *Large-scale Video Panoptic Segmentation in the Wild: A Benchmark*, in **CVPR**, 2022.

7. **Yu Wu**, Yi Yang. *Exploring Heterogeneous Clues for Weakly-Supervised Audio-Visual Video Parsing*, in **CVPR**, 2021.
8. Jiayu Miao, Yunchao Wei, **Yu Wu**, Chen Liang, Guangrui Li, Yi Yang. *VSPW: A Large-scale Dataset for Video Scene Parsing in the Wild*, in **CVPR**, 2021.
9. Ye Zhu, **Yu Wu**, Hugo Latapie, Yi Yang, Yan Yan. *Learning Audio-Visual Correlations from Variational Cross-Modal Generation*, in **ICASSP**, 2021.
10. Ye Zhu, **Yu Wu**, Yi Yang, Yan Yan. *Describing Unseen Videos via Multi-Modal Cooperative Dialog Agents*, in **ECCV**, 2020.
11. Xiaohan Wang\*, **Yu Wu\***, Linchao Zhu, Yi Yang, Yueting Zhuang. *Symbiotic Attention: UTS-Baidu Submission to the EPIC-Kitchens 2020 Action Recognition Challenge*, in **CVPR Workshop**, 2020. (\* Equal Contribution)
12. Yutian Lin, Lingxi Xie, **Yu Wu**, Chenggang Yan, Qi Tian. *Unsupervised Person Re-identification via Softened Similarity Learning*, in **CVPR**, 2020.
13. Zongxin Yang, Linchao Zhu, **Yu Wu**, Yi Yang. *Gated Channel Transformation for Visual Recognition*, in **CVPR**, 2020.
14. Mengshi Qi, Jie Qin, **Yu Wu**, Yi Yang. *Imitative Non-Autoregressive Modeling for Trajectory Forecasting and Imputation*, in **CVPR**, 2020.
15. Xiaohan Wang, **Yu Wu**, Linchao Zhu, Yi Yang. *Symbiotic Attention with Privileged Information for Egocentric Action Recognition*, in **AAAI (Oral)**, 2020.
16. **Yu Wu**, Linchao Zhu, Yan Yan, Yi Yang. *Dual Attention Matching for Audio-Visual Event Localization*, in **ICCV (Oral)**, 2019.
17. Jiayu Miao, **Yu Wu**, Ping Liu, Yuhang Ding, Yi Yang. *Pose-Guided Feature Alignment for Occluded Person Re-identification*, in **ICCV**, 2019.
18. Ruijie Quan, Xuanyi Dong, **Yu Wu**, Linchao Zhu, Yi Yang. *Auto-ReID: Searching for a Part-aware ConvNet for Person Re-Identification*, in **ICCV**, 2019.
19. **Yu Wu**, Linchao Zhu, Lu Jiang, Yi Yang. *Decoupled Novel Object Captioner*, in **ACM MM**, 2018.
20. **Yu Wu**, Yutian Lin, Xuanyi Dong, Yan Yan, Wanli Ouyang, Yi Yang. *Exploit the Unknown Gradually: One-Shot Video-Based Person Re-Identification by Stepwise Learning*, in **CVPR**, 2018.

## JOURNAL PUBLICATIONS

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1. **Yu Wu**, Lu Jiang, Yi Yang. *Switchable Novel Object Captioner*, in *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2022.
2. **Yu Wu**, Linchao Zhu, Xiaohan Wang, Yi Yang, Fei Wu. *Learning to Anticipate Egocentric Actions by Imagination*, in *IEEE Transactions on Image Processing (TIP)*, 2021.
3. Ye Zhu, **Yu Wu**, Yan Yan, Yi Yang. *Saying the Unseen: Video Descriptions via Dialog Agents*, in *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2021.
4. Ruijie Quan, **Yu Wu\***, Xin Yu, Yi Yang. *Progressive Transfer Learning for Face Anti-Spoofing*, in *IEEE Transactions on Image Processing (TIP)*, 2021. (\* Corresponding Author)
5. Jiayu Miao, **Yu Wu\***, Yi Yang. *Identifying Visible Parts via Pose Estimation for Occluded Person Re-Identification*, in *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 2021. (\* Corresponding Author)
6. Fan Ma, **Yu Wu**, Xin Yu, Yi Yang. *Learning with Noisy Labels via Self-Reweighting from Class Centroids*, in *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 2021.
7. Ruijie Quan, Linchao Zhu, **Yu Wu**, Yi Yang. *Holistic LSTM for Pedestrian Trajectory Prediction*, in *IEEE Transactions on Image Processing (TIP)*, 2021.
8. Xiaohan Wang, Linchao Zhu, **Yu Wu**, Yi Yang. *Symbiotic Attention for Egocentric Action Recognition with*

- Object-centric Alignment*, in IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2020.
9. **Yu Wu**, Lu Jiang, Yi Yang. *Revisiting EmbodiedQA: A Simple Baseline and Beyond*, in IEEE Transactions on Image Processing (**TIP**), 2020.
  10. Yutian Lin, **Yu Wu\***, Chenggang Yan, Mingliang Xu, Yi Yang. *Unsupervised Person Re-identification via Cross-camera Similarity Exploration*, in IEEE Transactions on Image Processing (**TIP**), 2020. (\* *Corresponding Author*)
  11. Qianyu Feng, **Yu Wu**, Hehe Fan, Chenggang Yan, Mingliang Xu, Yi Yang. *Cascaded Revision Network for Novel Object Captioning*, in IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), 2020.
  12. **Yu Wu**, Yutian Lin, Xuanyi Dong, Yan Yan, Wei Bian, Yi Yang. *Progressive Learning for Person Re-Identification with One Example*, in IEEE Transactions on Image Processing (**TIP**), 2019.
  13. Yutian Lin, Liang Zheng, Zhedong Zheng, **Yu Wu**, Yi Yang. *Improving person re-identification by attribute and identity learning*, in Pattern Recognition (**PR**), 2019.