# ZIHUI (SHERRY) XUE

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### **EDUCATION**

### The University of Texas at Austin

Sep 2020 – Present

Ph.D. in Electrical and Computer Engineering

- GPA: 4.00/4.00, Advisor: Prof. Kristen Grauman
- Research interests: video understanding, egocentric (first-person) vision, multimodal learning

Fudan University Sep 2016 – Sep 2020

B.E. in Electronic and Information Science and Technology

- GPA: 3.66/4.00, Advisor: Prof. Yuedong Xu
- Elite Engineering Program (top 5%)

# University of California, Santa Barbara (Exchange Program)

Sep 2018 - Dec 2018

UCEAP Exchange Program

- GPA: 4.00/4.00
- The College of Engineering Dean's Honors List

### **PUBLICATIONS**

- 1. **Z Xue**, K Ashutosh, K Grauman, "Learning Object State Changes in Videos: An Open-World Perspective", arXiv preprint. [PDF] [webpage]
- 2. K Ashutosh, **Z Xue**, T Nagarajan, K Grauman, "Detours for Navigating Instructional Videos", arXiv preprint. [PDF]
- 3. K Grauman, A Westbury, L Torresani, K Kitani, J Malik, ..., **Z Xue** et al., "Ego-exo4d: Understanding skilled human activity from first-and third-person perspectives", arXiv preprint. [PDF] [webpage]
- 4. **Z Xue**, K Grauman, "Learning Fine-grained View-Invariant Representations from Unpaired Ego-Exo Videos via Temporal Alignment", NeurIPS, 2023. [PDF] [webpage]
- 5. **Z Xue**, Y Song, K Grauman, L Torresani, "Egocentric Video Task Translation", **CVPR** (highlight, top 2.5%), 2023. [PDF] [webpage]
- 6. **Z Xue**, R Marculescu, "Dynamic multimodal fusion", CVPR MULA Workshop, 2023. [PDF] [code]
- 7. **Z Xue**, Z Gao, S Ren, H Zhao, "The modality focusing hypothesis: Towards understanding crossmodal knowledge distillation", **ICLR (oral, top 5%)**, 2023. [PDF] [webpage]
- 8. **Z Xue**, Y Yang, R Marculescu, "SUGAR: Efficient Subgraph-level Training via Resource-aware Graph Partitioning", IEEE Transactions on Computers, 2023. [PDF]
- 9. Y Yang, **Z Xue**, R Marculescu, "Anytime Depth Estimation with Limited Sensing and Computation Capabilities on Mobile Devices", CoRL, 2022. [PDF]
- 10. S Ren, Z Gao, T Hua, **Z Xue**, Y Tian, S He, H Zhao, "Co-advise: Cross inductive bias distillation", CVPR 2022. [PDF]
- 11. Y Huang, C Du, **Z Xue**, X Chen, H Zhao, L Huang, "What makes multi-modal learning better than single (provably)", NeurIPS, 2021. [PDF]
- 12. T Hua, W Wang, **Z Xue**, S Ren, Y Wang, H Zhao, "On feature decorrelation in self-supervised learning", **ICCV (oral, top 3%)**, 2021. [PDF] [webpage]
- 13. **Z Xue**, S Ren, Z Gao, H Zhao, "Multimodal knowledge expansion", ICCV, 2021. [PDF] [webpage]
- 14. S Jiao, **Z Xue**, X Chen, Y Xu, "Sampling graphlets of multiplex networks: a restricted random walk approach", ACM Transactions on the Web, 2021. [PDF]

### RESEARCH EXPERIENCE

## The University of Texas at Austin

Research Assistant to Prof. Kristen Grauman, Video Understanding

Sep 2022 - Present

FAIR, Meta AI

Visiting Student Researcher, Video Understanding Research Intern to Lorenzo Torresani, Egocentric (First-Person) Video

Jan 2023 – Present May 2022 – Dec 2022

The University of Texas at Austin Research Assistant to Prof. Radu Marculescu, Efficient Learning	Sep 2021 – May 2022
Shanghai Qi Zhi Institute Research Assistant to Prof. Hang Zhao, Multimodal Learning	Aug 2020 – Aug 2021
Fudan University Research Assistant to Prof. Yuedong Xu, Graph Sampling	Apr 2018 – Jun 2020
University of California, Santa Barbara Research Assistant to Prof. Zheng Zhang, Bayesian Tensor Learning	Dec 2018 – Aug 2019
HONORS AND AWARDS	
<ul> <li>1st Place in Talking-To-Me, 3rd Place in PNR Keyframe Localization, Ego4D ECCV 23</li> <li>Second Prize of the Scholarship for Outstanding Student, Fudan University</li> <li>Nation Second Prize in China Undergraduate Mathematical Contest in Modeling</li> <li>Ranked 8/2115 (first round) and 13/2116 (second round) in Alibaba Global Scheduling A</li> <li>Tung OOCL Scholarship (the First Prize), Fudan university</li> <li>Third Prize of the Scholarship for Outstanding Students, Fudan University</li> </ul>	2020 2018
MEDIA COVERAGE	
<ul> <li>Meta AI Research, "Overcoming challenges of video learning and multimodal perception</li> <li>Analytics India Magazine, "Top 8 papers by Meta AI" [Link]</li> <li>Meta AI Blog, "Egocentric Video Task Translation" [Link]</li> </ul>	2023 2023 2023
PROFESSIONAL SERVICE	

• Reviewer: CVPR, ICCV, ECCV, NeurIPS, ICLR, ICML, IJCV