# Zhao (Dylan) Wang

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### **EDUCATION**

**The Chinese University of Hong Kong (CUHK)** *Ph.D. Student, Department of Computer Science and Engineering* 

- Research Interests: video understanding/generation, model pre-training/selection, and healthcare
- Advisor: Prof. Qi Dou

### Zhejiang University (ZJU)

B.Eng., College of Information Science and Electronic Engineering

• Advisor: Prof. Honggang Zhang (IEEE Fellow, AAIA Fellow)

### EXPERIENCE

## Shanghai AI Laboratory

Research Collaboration, AI for Science Group

- Topic: Human Centric Motion Generation
- Advisor: Prof. Wanli Ouyang, Prof. Dan Xu, Dr. Shixiang Tang, Mr. Di Huang

**University of California, San Diego (UCSD)** Visiting Student, Department of Electrical and Computer Engineering

- Topic: Medical Imaging Generation
- Advisor: Prof. Pengtao Xie

### PUBLICATIONS

### Google Scholar Profile (631 citations by Jun. 2025)

Note: \* indicates equal contributions.

- [1] **Zhao Wang**, Hao Wen, Lingting Zhu, Chenming Shang, Yujiu Yang, Qi Dou. "AnyCharV: Bootstrap Controllable Character Video Generation with Fine-to-Coarse Guidance". *under review at Conference on Neural Information Processing Systems* (NeurIPS), 2025. [paper]
- [2] Zhao Wang\*, Jin-Yi Xiang\*, Zheyao Gao, Mo Yang, Chengyan Wang, Lian-Ming Wu, Qi Dou. "Large Language Model-Enhanced Multimodal Deep Learning for Predicting Major Adverse Cardiovascular Events after Myocardial Infarction". *under review at Nature Communications* (NC), 2025.
- [3] **Zhao Wang**, Chang Liu, Lingting Zhu, Shaoting Zhang, Qi Dou. "Improving Foundation Model for Endoscopy Video Analysis via Representation Learning on Long Sequences". *IEEE Journal of Biomedical and Health Informatics* (JBHI, IF: 7.7), 2025. [paper]
- [4] Zhao Wang, Aoxue Li, Lingting Zhu, Yong Guo, Qi Dou, Zhenguo Li. "CustomVideo: Customizing Textto-Video Generation with Multiple Subjects". *under review at IEEE Transactions on Multimedia* (TMM), 2024. [paper]
- [5] Yuan Wang\*, Zhao Wang\*, Junhao Gong\*, Di Huang, Tong He, Wanli Ouyang, Jile Jiao, Xuetao Feng, Qi Dou, Shixiang Tang, Dan Xu. "Holistic-Motion2D: Scalable Whole-body Human Motion Generation in 2D Space". *under review at IEEE Transactions on Pattern Analysis and Machine Intelligence* (TPAMI), 2024. [paper]
- [6] Zhao Wang\*, Yeqian Zhang\*, Jiayi Gu\*, Yueyao Chen, Yonghao Long, Xiang XIa, Puhua Zhang, Chunchao Zhu, Zerui Wang, Qi Dou, Zheng Wang, Zizhen Zhang. "HiEndo: Harnessing Large-Scale Data for Generating High-resolution Laparoscopy Videos under a Two-Stage Framework". *under review at Computer Assisted Surgery* (CAS), 2024.

# GitHub: github.com/kyfafyd Homepage: kyfafyd.wang

Sep. 2017 – Jun. 2021 Hangzhou, China

Shanghai, China (Remote)

Nov. 2023 - Nov. 2024

Feb. 2020 – May. 2020 La Jolla, CA

*Shatin, Hong Kong* and healthcare

Aug. 2021 – Dec.2025 (expected)

- [7] **Zhao Wang**, Aoxue Li, Zhenguo Li, Qi Dou. "Efficient Transferability Assessment for Selection of Pre-trained Detectors". *IEEE/CVF Winter Conference on Applications of Computer Vision* (WACV), 2024. [paper]
- [8] Zhao Wang, Aoxue Li, Fengwei Zhou, Zhenguo Li, Qi Dou. "Open-Vocabulary Object Detection with Meta Prompt Representation and Instance Contrastive Optimization". *British Machine Vision Conference* (BMVC), 2023. [paper]
- [9] Zhao Wang, Chang Liu, Shaoting Zhang, Qi Dou. "Foundation Model for Endoscopy Video Analysis via Large-scale Self-supervised Pre-train". *International Conference on Medical Image Computing and Computer-Assisted Intervention* (MICCAI), 2023. [paper] (early accept)
- [10] Zhao Wang, Quande Liu, Qi Dou. "Contrastive Cross-site Learning with Redesigned Net for COVID-19 CT Classification". IEEE Journal of Biomedical and Health Informatics (JBHI, IF: 7.7), 2020. [paper] (Ranking 22nd in Google Scholar Metrics)
- [11] Lingting Zhu, Guying Lin, Jinnan Chen, Xinjie Zhang, Zhenchao Jin, **Zhao Wang**, Lequan Yu. "Large Images are Gaussians: High-quality Large Image Representations with 2D Gaussian Splatting". *The Association for the Advancement of Artificial Intelligence* (AAAI), 2025. [paper]
- Shizhan Gong, Yuan Zhong, Wenao Ma, Jinpeng Li, Zhao Wang, Jingyang Zhang, Pheng-Ann Heng, Qi Dou.
   "3DSAM-adapter: Holistic Adaptation of SAM from 2D to 3D for Promptable Medical Image Segmentation". Medical Image Analysis (MedIA, IF: 10.7), 2024. [paper]
- [13] Nan Lu, Zhao Wang, Xiaoxiao Li, Gang Niu, Qi Dou, Masashi Sugiyama. "Federated Learning from Only Unlabeled Data with Class-Conditional-Sharing Clients". *International Conference on Learning Representations* (ICLR), 2022. [paper]

### SELECTED AWARDS

<ul> <li>Top 10 Research Nomination Award, ZJU</li> <li>Highest honor for only top 20/50k+ students among all undergraduates and graduates</li> </ul>	2021
Honorable Winnner, Mathematical Contest in Modeling (MCM)	2020
• 2 <sup>nd</sup> Prize, The 14th College Student Robot Competition, ZJU (Ranking: 6/200+ teams)	2018
• Northwest A & F University Scholarship (Ranking: 2/1000+ high school students)	2016
• 1 <sup>st</sup> Prize, Chinese Physics Olympiad (CPhO, Province Level, Top <b>0.1</b> %)	2016

### **PROFESSIONAL SERVICES**

- Conference Reviewer: NeurIPS 2023–2025, ICML 2024–2025, ICLR 2024–2025, AAAI 2025, ECCV 2024, WACV 2024–2025, BMVC 2023–2025, MICCAI 2023–2024, ISBI 2023–2024, IPCAI 2022
- Journal Reviewer: npj Digital Medicine, IJCV, TIP, JBHI, Pattern Recognition Letters, Scientific Reports
- Volunteer Helper: Medical Imaging meets NeurIPS, 2022
- Program Committee: Distributed, Collaborative and Federated Learning Workshop@MICCAI, 2022–2025
- Membership: IEEE Student Member, ACM Student Member

### TEACHING

### **Teaching Assistant:**

CSCI1110 Problem Solving by Programming, CUHK	Fall 2022
CSCI1030 Hands-On Introduction to Java, CUHK	Spring 2022
• CSCI3230 Fundamentals of Artificial Intellgence (with Elite-Mirror ESTR 3108), CUHK	Fall 2021

### SKILLS

- Programming Languages: Python, C/C++, Bash, HTML/CSS
- Tools and Frameworks: PyTorch, LATEX, Git
- Platforms: Linux, MacOS, Windows