Wentao Zhu

Center on Frontiers of Computing Studies Peking University Haidian, Beijing P.R.China 100871	Email: wtzhu@pku.edu.cn Homepage: https://wentao.live	
EDUCATION		
Peking University Ph.D. Student, Computer Science		2020 - 2025
Peking University Bachelor of Science, Computer Science and Economics (Dual Degree)		2016 - 2020
Stanford University Exchange Student, International Honors Program		2018
WORK EXPERIENCE		
Research Internship, Qualcomm AI Research		2024
Research Internship, Shanghai AI Lab		2020 - 2022
Research Internship, SenseTime Research		2019 - 2020
Visiting Student, The Chinese University of H	ong Kong (MMLab)	2018 - 2019

RESEARCH INTEREST

Computer Vision, Artificial Intelligence, Representation Learning

PREPRINTS

1. Z. Li, X. Ma, Q. Shang, **W. Zhu**, H. Ci, Y. Qiao, and Y. Wang, "Efficient Action Counting with Dynamic Queries," arXiv preprint arXiv:2403.01543.

PUBLICATIONS

- 1. H. Ye, X. Ma, H. Ci, **W. Zhu**, and Y. Wang, "FreeCloth: Free-form Generation Enhances Challenging Clothed Human Modeling," CVPR 2025.
- 2. X. Ma, J. Su, Y. Xu, **W. Zhu**, C. Wang, and Y. Wang, "VMarker-Pro: Probabilistic 3D Human Mesh Estimation from Virtual Markers," T-PAMI 2025.

- 3. H. Wang*, **W. Zhu***, L. Miao, Y. Xu, F. Gao, Q. Tian, and Y. Wang, "Aligning Human Motion Generation with Human Perceptions," ICLR 2025.
- 4. S. Ban, J. Fan, X. Ma, **W. Zhu**⁺, Y. Qiao⁺, and Y. Wang, "Real-time Holistic Robot Pose Estimation with Unknown States," ECCV 2024.
- 5. W. Zhu, Z. Zhang, and Y. Wang, "Language Models Represent Beliefs of Self and Others," ICML 2024.
- 6. Y. Xu, X. Ma, J. Su, **W. Zhu**, Y. Qiao, and Y. Wang, "ScoreHypo: Probabilistic Human Mesh Estimation with Hypothesis Scoring," CVPR 2024.
- 7. W. Zhu*, X. Ma*, D. Ro*, H. Ci, J. Zhang, J. Shi, F. Gao, Q. Tian, and Y. Wang, "Human Motion Generation: A Survey," T-PAMI 2024.
- 8. **W. Zhu***, J. Qin*, Y, Lou, H. Ye, X. Ma, H. Ci, and Y. Wang, "Social Motion Prediction with Cognitive Hierarchies," NeurIPS 2023.
- 9. X. Ma*, S. Kaufhold*, S. Su*, **W. Zhu**, J. Terwilliger, A. Meza, Y. Zhu, F. Rossano, and Y. Wang, "ChimpACT: A Longitudinal Dataset for Understanding Chimpanzee Behaviors," NeurIPS 2023.
- 10. **W. Zhu**, X. Ma, Z. Liu, L. Liu, W. Wu, and Y. Wang, "MotionBERT: A Unified Perspective on Learning Human Motion Representations," ICCV 2023.
- 11. H. Ci, M. Wu, **W. Zhu**, X. Ma, H. Dong, F. Zhong, and Y. Wang, "GFPose: Learning 3D Human Pose Prior with Gradient Fields," CVPR 2023.
- 12. X. Ma, C. Wang, J. Su, **W. Zhu**, and Y. Wang, "3D Human Mesh Estimation from Virtual Markers," CVPR 2023.
- 13. H. Ye*, **W. Zhu***, C. Wang, R. Wu, and Y. Wang, "Faster VoxelPose: Real-time 3D Human Pose Estimation by Orthographic Projection," ECCV 2022.
- 14. H. Zhu*, W. Wu*, **W. Zhu**, L. Jiang, S. Tang, L. Zhang, Z. Liu, and C. C. Loy, "CelebV-HQ: A Large-scale Video Facial Attributes Dataset," ECCV 2022.
- 15. **W. Zhu***, Z. Yang*, Z. Di, W. Wu, Y. Wang, and C. C. Loy, "MoCaNet: Motion Retargeting in-the-wild via Canonicalization Networks," AAAI 2022.
- 16. Z. Yang*, W. Zhu*, W. Wu, C. Qian, Q. Zhou, B. Zhou, and C. C. Loy, "TransMoMo: Invariance-Driven Unsupervised Video Motion Retargeting," CVPR 2020.

* = equal contributions, † = corresponding author.

SERVICES

Reviewer / PC Member

Conference: CVPR, ECCV, ICCV, ICLR, AAAI, NeurIPS, IEEE VR, SIGGRAPH Asia

Journal: TPAMI, IJCV, TOG, TVCG, TIP

Workshop Organization

The First Workshop on Humanoid Agents @ CVPR 2025 Virtual Humans for Robotics and Autonomous Driving @ CVPR 2024

TEACHING

Robot Vision and Learning (TA, Graduate Course in English), Peking University	2022
Practice of Programming in C & C++ (TA), Peking University	2021
Career Planning and Leadership Development (TA), Peking University	2020

AWARDS AND HONORS

National Scholarship, Peking University	2024
Merit Student, Peking University	2024
Top Reviewer, NeurIPS 2023	2023
Ubiquant Scholarship, Peking University	2023
Award for Research Excellence, Peking University	2023
AAAI-22 Scholarship	2022
Grand Prize, Challenge Cup of Peking University	2021
Sino Scholarship, Peking University	2018
WWDC Scholarship, Apple Inc.	2018
Meritorious Winner, COMAP's Interdisciplinary Contest in Modeling	2018
Gold Prize and Best Information Processing Project Nomination, iGEM Competition	2017

Updated March 2025