Zhenhao Zhang(章震豪)

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EDUCATION

ShanghaiTech University, Master Student in Computer Science CS Ranking 12

2024.9 - now

China University of Petroleum, B.E. Degree in Computer Science

2020.9 - 2024.6

PUBLICATIONS

Research Interest: Large Language Model, Generative AI, Embodied AI

*Equal Contribution †Corresponding author

OpenHOI: Open-World Hand-Object Interaction Synthesis with Multimodal Large Language Model[paper][page]

- **Zhenhao Zhang**, Ye Shi[†], Lingxiao Yang, Suting Ni, Qi Ye, Jingya Wang[†]
- ShanghaiTech University, Zhejiang University
- Introduce the first Open-World Hand-Object Interaction (HOI) Synthesis framework that can generate Long-horizon HOI sequences of Unseen Objects from Open-vocabulary instruction with 3D Multimodal Large Language Model.

DAG: Unleash the potential of Diffusion Model for Open-Vocabulary 3D Affordance Grounding[page]

- Hanqing Wang*†, **Zhenhao Zhang***, Kaiyang Ji*, Mingyu Liu, Wenti Yin, Yuchao Chen, Zhirui Liu, Hangxing Zhang
- Shanghai AI Lab, Shanghai Tech University, Zhejiang University, Huazhong University of Science and Technology
- A novel framework designed to unlock affordance knowledge within diffusion models for 3D affordance grounding.

Diffusion-based Reinforcement Learning via Q-weighted Variational Policy Optimization[paper][page]

- Shutong Ding, Ke Hu, **Zhenhao Zhang**, Kan Ren, Weinan Zhang, Jingyi Yu, Jingya Wang, Ye Shi[†]
- ShanghaiTech University, Shanghai Jiao Tong University
- We propose a novel diffusion-based online RL algorithm, conducting policy optimization with Q-weighted variational loss and diffusion entropy regularization to exploit the expressiveness and exploration capability of diffusion policy.

HONORS AND AWARDS

ShanghaiTech University, Academic Scholarship	2024
China University of Petroleum, Academic Scholarship, Outstanding Scholarship(Competition)	2023
China Robotics and Artificial Intelligence Competition, National Second Prize	2023
LanQiao Cup, Shandong First Prize in Group A,	2023
China University of Petroleum, Outstanding Scholarship(Competition)	2022
Kaggle Featured Code Competition, Bronze(solo)	2022
America Mathematics Contest in Modeling, Finalist, Top-1%	2022
LanQiao Cup, Shandong First Prize in Group A,	2021

RESEARCH EXPERIMENTS

ShanghaiTech University, Master Student

2024.9-now

- VDI Center, YesAI Lab&Vihuman Lab. Advisor: Prof. Ye Shi and Prof. Jingya Wang
- Research Area: Large Language Model, Generative AI, Embodied AI
- Paper:Arxiv¹[paper],Arxiv²[page]

ShanghaiTech University, Visiting Student

2024.3-2024.9

- VDI Center, YesAI Lab. Advisor: Prof. Ye Shi
- Research Area: Reinforcement Learning, Embodied AI
- Paper:NeurIPS2024[paper]

China Unversity of Petroleum, Undergrate Student

2023.3-2023.9

- Intelligent Vehicle Laboratory. Advisor Prof. Jizhi Song and Prof. Yang Yan
- Research Area: Object Detection and Tracking, Robotics Learning, Computer Vision and Pattern Recognition
- We designed and produced two smart cars from scratch, win the National Second Prize in 25th CRAIC

China Unversity of Petroleum, Undergrate Student

2021.7-2023.9

- School of Science, Department of Data Science and Statistics. Advisor Prof. Yunquan Song
- Research Area: High-Dimensional Statistic, Data Mining, Biomedical Foundation Model
- Paper:Arxiv[paper]

SERVICES

- Reviewer: NeurIPS'24,ICLR'25,AISTATS'25,ICML'25,NeurIPS'25,IJCNN'25,
- Member:CAA Member,CCF Student Member