Hang Ye

Artificial Intelligence
Yuanpei College, Peking University

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https://github.com/AlvinYH

Education

Degree	Institute	Major	GPA	Year
Bachelor	Yuanpei College, Peking University	Artificial Intelligence	3.726 (top 20%)	2019-2023

Experience

- **CVDA Lab** *Apr. 2021 - Present*
  Instructor: Yizhou Wang
  – Improved the inference speed of Voxelpose model in the multi-view 3D human pose estimation task by ten times. Our work has been accepted by ECCV 2022.
  – Developed an integrated framework for capturing the poses of basketball players using the proposed efficient algorithm. We have cooperated with P.E. department and established our system with the cameras set up in Wusi playground.

Publication

• Hang Ye*, Wentao Zhu*, Chunyu Wang, Rujie Wu, and Yizhou Wang. "Faster VoxelPose: Real-time 3D Human Pose Estimation by Orthographic Projection." ECCV 2022.

• Quanlin Wu, Hang Ye, Yuntian Gu, Huishuai Zhang, Liwei Wang, Di He. "Denoising Masked AutoEncoders are Certifiable Robust Vision Learners." ICLR 2023.

Projects

- **Towards Human-Level Bimanual Dexterous Manipulation with Visual RL** *Oct. 2022 - Jan. 2023*
  Instructor: Prof. Yaodong Yang Institute for Artificial Intelligence, PKU
  – Designed a new visual-based RL benchmark involving 20 bi-manual manipulation tasks with two dexterous hands in a simulator.
  – Utilized common RL algorithms to solve the tasks based on partial or full visual inputs. We trained a 3D visual backbone to extract visual features for policy learning. And the success rate was on par with previous result in state-based setting. We plan to submit our work to TPAMI this year.

- **Guided Diffusion Model for Adversarial Purification from Random Noise** *Apr. 2022 - Jul. 2022*
  Instructor: Prof. Liwei Wang Department of Machine Intelligence, PKU
  – Proposed a novel guided diffusion-based approach to purify adversarial images. Utilized diffusion models for denoised smoothing, which improved the certified test accuracy by about 5% compared with vanilla randomized smoothing.
  – We've uploaded the final report on https://arxiv.org/abs/2206.10875. It has been cited three times.

Skills

- **Programming:** C/C++, Python, Bash
- **Frameworks and Tools:** PyTorch, Git, Vim
- **Language Skills:** Mandarin (native), English (proficient, TOEFL 106, CET-6 659)
- **Interests:** Badminton, Guitar, Swimming

awards and honors

- **Fuguang Scholarship,** Peking University *2020-2022*
- **Merit Student,** Peking University *2020-2022*
- **First Prize** in 12th Chinese Mathematics Competition, CMC *2020*
- **Second Class Scholarship for Freshmen,** Peking University *2019*