Yuhao Zhang

yzhanglp@connect.ust.hk | github.com/yzhanglp | yzhanglp.github.io

Research Interest

Computer Vision, Machine Learning

Education

NUS (National University of Singapore)   2024/01 – 2024/05 (Expected)
Computer Department Exchange

Hong Kong University of Science and Technology   2021/09 – 2025/08 (Expected)
BSc in Computer Science & Mathematics
- GPA: 3.917/4.3

Publication

DragVideo: Interactive Drag-style Video Editing (with Arxiv link)
Yufan Deng*, Ruida Wang*, Yuhao ZHANG*, Chi-Keung Tang, Yu-Wing Tai   Under Review

Research Experience

DragVideo: Interactive Drag-style Video Editing   2023/07 – 2023/11
Advised by Prof. Chi-Keung Tang   HKUST
And Prof. Yu-Wing Tai   Dartmouth College
- Propose a novel method for drag-style Video Editing with a user-friendly interface
- Use the 3D diffusion model and task-specific LoRA to solve the frame inconsistency in the editing process
- Submitted to **CVPR24**

Learning and Adversarial Style Augmentation for Unseen Domain Anomaly Detection   2022/09 – 2023.9
Advised by Prof. Hao Chen   HKUST
- Researched medical abnormal detection in the unseen domain.
- Try to solve the domain shift problem by applying style augmentation and dual branch inference.

Projects

Review on theoretical understanding of Transformers   2023/09 – Ongoing
Project of Postgraduate Machine Learning Course   HKUST
- Research on the White-Box Transformer and its architecture
- Look into several current research directions like Training Dynamics, Expressiveness, and theoretical explorations into Transformers applied in Computer Vision and Graph

Research Intern in StatML Lab   2023/2 – 2023/4
Advised by Prof. Tong Zhang   HKUST
- Contribute to developing LLM-FT, a codebase for large language model finetuning and inference
- Collect and preprocess academic data for large language model training

Selected Awards

- Dean's list for all semesters of study in HKUST

Skills

PyTorch, LaTeX, git