# Yuhao Zhang

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#### **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: 3.967/4.3 (top 2%)
- Major GPA: 4.045/4.3

#### **Selected Courses**

COMP5212 PG level Machine Learning (A+)

MATH5411 Advanced Probability (A+)

COMP3711 Algorithm(A+)

#### **Publication**

## <u>DragVideo: Interactive Drag-style Video Editing (with Arxiv link)</u>

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 Dartmouth College

And Prof. Yu-Wing Tai

- 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

Project of Postgraduate Machine Learning Course

2023/09 - Ongoing

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, Markdown