# Yufan Deng

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#### **EDUCATION**

## Hong Kong University of Science and Technology (HKUST)

09/2021 - Present

Hong Kong

BEng in Computer Science, Minor in Mathematics

o GPA: 4.19/4.30, Rank: 1 out of 136

Graduate-level Course: COMP5214 Advanced Deep Learning Architecture,
 COMP 5212 Machine Learning, COMP6211E Optimization for Machine Learning

• Stanford University
Summer Research
O6/2024 - 09/2024
Stanford, CA

• École Polytechnique Fédérale de Lausanne (EPFL)

02/2024 - 06/2024

Lausanne, Switzerland

• GPA: 5.5/6.0

Exchange

High School

• Graduate-level Course: CS552 Modern Natural Language Processing

Shenzhen Middle School

09/2018 - 06/2021

Shenzhen, China

o GPA: 4.32/4.45

PUBLICATIONS \* DENOTES EQUAL CONTRIBUTION

[1] Yufan Deng\*, Ruida Wang\*, Yuhao Zhang\*, Yu-Wing Tai, Chi-Keung Tang. "DragVideo: Interactive Drag-style Video Editing". In: European Conference on Computer Vision (ECCV). 2024.

[2] Yufan Deng\*, Yuhao Zhang\*, Chen Geng, Shangzhe Wu, Jiajun Wu. "Anymate: A Dataset and Baselines for Learning 3D Object Rigging". Under Review: IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). 2025.

#### RESEARCH EXPERIENCE

### • Anymate: A Dataset and Baselines for Learning 3D Object Rigging [2]

06/2024 - 11/2024

Stanford, CA

Stanford Vision and Learning Lab & Advisor: Prof. Jiajun Wu (Stanford), Prof. Shangzhe Wu (Cambridge)

- Curated Anymate Dataset, a large-scale dataset of 178K 3D assets with rigging and skinning information—over 50 times larger than existing datasets.
- Developed Anymate Model, a scalable transformer-based framework to learn auto-rigging from the large-scale dataset.
- Significantly outperformed existing methods, achieved accurate bone skeletons and skinning weights for realistic animations, and submitted to CVPR2025.

# • DragVideo: Interactive Drag-style Video Editing ☑

06/2023 - 02/2024

Hong Kong University of Science and Technology

Hong Kong

Advisor: Prof. Chi-Keung Tang (HKUST), Prof. Yu-Wing Tai (Dartmouth)

- Proposed *DragVideo*, the first framework lifting the drag-style editing from 2D images to videos.
- Addressed video quality issues by employing Low-Rank Adaptation (LoRA) and Mutual Self-Attention mechanism.
- Developed a web UI, conducted analytical experiments, and published in ECCV2024.

#### HONORS AND AWARDS

HKSAR Government Scholarship	09/2022 - 2025
• Tin Ka Ping Scholarship (Exchange)	05/2024
HKUST Alumni Endowment Fund High Flyers Program Scholarship	09/2023
Tse Cheuk Ng Tai Scholarship	08/2023
• Dean's List for 5/5 semester	01/2022-2024
• First Runner-Upin Tencent Rhino-Bird High School Elite Training Program	12/2020

#### ADDITIONAL RELEVANT EXPERIENCE

• Research Assistant 03/2024 - 06/2024

Visual Intelligence Lab, HKUST ♂

Remote

• Assisted in field survey for AI Generated Content project.

• Experimented with various latest generative models for image, video, audio, and speech.

• Teaching Assistant 07/2023 - 08/2023

COMP2211 (Exploring Artificial Intelligence), HKUST

Hong Kong

• Prepared three lab assignments for KMeans, MLP, and CNN.

• Research Assistant 06/2022 - 05/2023

Smart Lab, HKUST Hong Kong

• Assisted projects related to deep learning for medical images, specifically the fundus image.

· Focused on synthetic data augmentation, quality-aware model, and multi-task model.

# COURSE PROJECTS

• EduGPT - DPO is all you need ☑

02/2024 - 05/2024

CS552 Modern Natural Language Processing Project at EPFL

Lausanne, Switzerland

• DiffAdv: Generating an Adversarial Example for Any Given Image Using Diffusion Models 🗗 09/2023 - 12/2023 COMP5212 Machine Learning Project at HKUST

Hong Kong

• Music Generation Conditioned on Emotion ☑

02/2023 - 06/2023

COMP5214 Advanced Deep Learning Architecture Project at HKUST

Hong Kong

• Programming Languages: Python (Skilled), Java (Skilled), C++ (Skilled), PHP (Basic), SQL (Basic), C (Basic)

• Deep Learning Toolkits: Pytorch, Hugging Face Libraries

• Miscellaneous: LaTeX, Linux, Git, Matlab, MS Office, Adobe

# ADDITIONAL INFORMATION

Languages: Mandarin (Native), English (Proficient) Interests: Piano performance, Frisbee, Badminton

LAST UPDATE: December 11, 2024