XING Jinbo, Jerome

1026, Ho Sin-Hang Engineering Building, CUHK, Sha Tin, New Territories **Phone:** (+86)15771501030

EDUCATION

The Chinese University of Hong Kong (CUHK)

Hong Kong, China

Ph.D. in Computer Science and Engineering

Sept. 2021 – Present

Supervisor: Tien-Tsin Wong Anticipated graduation: August 2025 Cumulative GPA: 3.91/4.0

The Chinese University of Hong Kong (CUHK)

Hong Kong, China

M.Sc. in Computer Science

Sept. 2020 – Jun. 2021

Supervisor: Tien-Tsin Wong Cumulative GPA: 3.76/4.0

The Chinese University of Hong Kong (CUHK)

Hong Kong, China

B.Sc. in Computer Science (ELITE Stream)

Sept. 2016 – Jun. 2020

Cumulative GPA: 3.6/4.0, Major GPA: 3.7/4.0, Honor Class: First Honor

RESEARCH INTERESTS

Generative AI (controllable image/video generation)

REPRESENTATIVE WORKS IN GENERATIVE AI

- [1]. DynamiCrafter: Animating Open-domain Images with Video Diffusion Priors (citation: 50) Jinbo Xing, Menghan Xia, Yong Zhang, Haoxin Chen, Wangbo Yu, Hanyuan Liu, Xintao Wang, Tien-Tsin Wong, and Ying Shan
 - European Conference on Computer Vision (ECCV), 2024, Oral
- [2]. ToonCrafter: Generative Cartoon Interpolation PDF Stars 5k Jinbo Xing, Hanyuan Liu, Menghan Xia, Yong Zhang, Xintao Wang, Ying Shan, and Tien-Tsin Wong ACM SIGGRAPH Asia (Journal Track and Top 5% rating), 2024 (CCF-A)
- [3]. VideoCrafter1: Open Diffusion Models for High-Quality Video Generation 7 (citation: 96) Haoxin Chen*, Menghan Xia*, Yingqing He*, Yong Zhang*, Xiaodong Cun*, Shaoshu Yang, Jinbo Xing, Yaofang Liu, Qifeng Chen, Xintao Wang, Chao Weng, and Ying Shan
- [4]. Make-Your-Video: Customized Video Generation Using Textual and Structural Guidance (citation: 42) Jinbo Xing, Menghan Xia, Yuxin Liu, Yuechen Zhang, Yong Zhang, Yingqing He, Hanyuan Liu, Haoxin Chen, Xiaodong Cun, Xintao Wang, Ying Shan, and Tien-Tsin Wong IEEE Transactions on Visualization and Computer Graphics (TVCG), 2024 (CCF-A)
- [5]. CodeTalker: Speech-Driven 3D Facial Animation with Discrete Motion Prior PDF (citation: 95) Jinbo Xing, Menghan Xia, Yuechen Zhang, Xiaodong Cun, Jue Wang, and Tien-Tsin Wong IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023 (CCF-A)

OTHER PUBLICATIONS

- [1]. Scale-arbitrary Invertible Image Downscaling PDF Jinbo Xing*, Wenbo Hu*, Menghan Xia, and Tien-Tsin Wong IEEE Transactions on Image Processing (TIP), 2023 (CCF-A)
- [2]. Flow-aware synthesis: A generic motion model for video frame interpolation $^{PDF}_{7}$ Jinbo Xing*, Wenbo Hu*, Yuechen Zhang, and Tien-Tsin Wong Computational Visual Media Journal (CVM), 2021 (JCR-Q1)

- [3]. RIVAL: Real-World Image Variation by Aligning Diffusion Inversion Chain Yuechen Zhang, **Jinbo Xing**, Eric Lo, and Jiaya Jia
 Neural Information Processing Systems (**NeurIPS**), spotlight, 2023 (CCF-A)
- [4]. Ref-NPR: Reference-Based Non-Photorealistic Radiance Fields Yuechen Zhang, Zexin He, **Jinbo Xing**, Xufeng Yao, Jiaya Jia IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023 (CCF-A)
- [5]. StyleCrafter: Enhancing Stylized Text-to-Video Generation with Style Adapter ^{PDF} Gongye Liu, Menghan Xia, Yong Zhang, Haoxin Chen, **Jinbo Xing**, Xintao Wang, Yujiu Yang, and Ying Shan

ACM SIGGRAPH Asia (Journal Track), 2024 (CCF-A)

- [6]. Animate-A-Story: Storytelling with Retrieval-Augmented Video Generation PDF
 Yingqing He*, Menghan Xia*, Haoxin Chen*, Xiaodong Cun, Yuan Gong, **Jinbo Xing**, Yong Zhang, Xintao Wang, Chao Weng, Ying Shan, and Qifeng Chen
 European Conference on Computer Vision Workshop (**ECCVW**), AI4VA, 2024
- [7]. Unstructured Knowledge Access in Task-oriented Dialog Modeling using Language Inference, Knowledge Retrieval and Knowledge-Integrative Response Generation Mudit Chaudhary, Borislav Dzodzo, Sida Huang, Chun Hei Lo, Mingzhi Lyu, Lun Yiu Nie, Jinbo Xing, Tianhua Zhang, Xiaoying Zhang, Jingyan Zhou, Hong Cheng, Wai Lam, and Helen Meng AAAI Conference on Artificial Intelligence Workshop Program (AAAIW), DSTC9, 2021.

OTHER PREPRINTS

- [1]. Video Colorization with Pre-trained Text-to-Image Diffusion Models PDF Hanyuan Liu, Minshan Xie, **Jinbo Xing**, Chengze Li, and Tien-Tsin Wong
- [2]. Improved Diffusion-based Image Colorization via Piggybacked Models Hanyuan Liu, **Jinbo Xing**, Minshan Xie, Chengze Li, and Tien-Tsin Wong
- [3]. MagicStick: Controllable Video Editing via Control Handle Transformations Yue Ma, Xiaodong Cun, **Jinbo Xing**, Xiang Lyu, Yingqing He, Chenyang Qi, Yabo Zhang, Bowei Jia, Chubin Chen, and Qifeng Chen

WORK EXPERIENCE

Adobe Research San Jose, CA, U.S.

Research Scientist Intern

Jul. 2024 – Dec. 2024

- Supervised by: Dr. Long, Mai
- Conducting research on controllable video generation

Tencent AI Lab Shenzhen, China

Research Intern

Research Assistant

Jul. 2022 -Jul. 2024

- Supervised by: Dr. Menghan, Xia
- Cooperating with team members, conducting research on speech-driven 3D facial animation and text-to-video/image-to-video generation, and processing video data on a scale of millions for dataset preparation.

Stanley Ho Big Data Decision Analytics Research Centre, CUHK

Hong Kong, China

Supervised by: Prof. Meiling, Meng

May 2020 - Jun. 2021

• Developed modularized code for research projects and conducted research on retrieval-based response generation.

AWARDS AND SCHOLARSHIPS

•	Postgraduate Studentship	2021
•	Distinguished Academic Performance Scholarship	2020
•	Entrance Scholarship of MSc Programme in Computer Science	2020
•	Dean's List of Faculty of Engineering	2020, 2019, 2016
•	ELITE Stream Student Scholarship	2019, 2018
•	Computer Science scholarship	2016
•	Faculty of Engineering Admission Scholarship	2016
•	S.H. Ho College Matriculation Scholarships for Academic Excellence (Mainland)	2016
•	Full Scholarship for Undergraduate Students (Mainland)	2016

TEACHING ASSISTANT

•	CSCI 3290	Computational Imaging and Vision	2023-2024
•	CSCI 5390	Advanced GPU Programming	2023-2024
•	CSCI 3280	Introduction to Multimedia Systems	2022-2023, 2021-2022
•	ENGG 1110	Problem Solving by Programming	2021-2022

ACADEMIC SERVICES

TVCJ, IEEE TVCG, IJCV, ACM CSUR, IEEE TMM ECCV 2024, MM 2024, SIGGRAPH Asia 2024

Journal Review Conference Review