XING Jinbo, Jerome

1026, Ho Sin-Hang Engineering Building, CUHK, Sha Tin, New Territories
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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 PDF ⭐Stars 2k (citation: **42**)
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

[2]. VideoCrafter1: Open Diffusion Models for High-Quality Video Generation PDF ⭐Stars 4.2k (citation: **73**)
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

[3]. Make-Your-Video: Customized Video Generation Using Textual and Structural Guidance PDF (citation: **39**)
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

[4]. CodeTalker: Speech-Driven 3D Facial Animation with Discrete Motion Prior PDF ⭐Stars 493 (citation: **76**)
Jinbo Xing, Menghan Xia, Yuechen Zhang, Xiaodong Cun, Jue Wang, and Tien-Tsin Wong
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023

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

[2]. Flow-aware synthesis: A generic motion model for video frame interpolation PDF
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 PDF
Yuechen Zhang, **Jinbo Xing**, Eric Lo, and Jiaya Jia
Neural Information Processing Systems (**NeurIPS**), spotlight, 2023

[4]. Ref-NPR: Reference-Based Non-Photorealistic Radiance Fields [PDF]
Yuechen Zhang, Zexin He, **Jinbo Xing**, Xufeng Yao, Jiaya Jia
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023

[5]. Unstructured Knowledge Access in Task-oriented Dialog Modeling using Language Inference, Knowledge Retrieval and Knowledge-Integrative Response Generation [PDF]
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 [PDF]
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

[4]. 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

[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

WORK EXPERIENCE

Adobe Research   **San Jose, CA, U.S.**
Research Scientist Intern (Incoming)   *Jul. 2024 – Dec. 2024*
- Supervised by: Dr. Long, Mai
- Will conduct research on controllable video generation

Tencent AI Lab   **Shenzhen, China**
Research Intern   *Jul. 2022 – present*
- 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**
Research Assistant   *May 2020 – Jun. 2021*
- Supervised by: Prof. Meiling, Meng
- 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,   Journal Review
ECCV 2024, MM 2024, SIGGRAPH Asia 2024   Conference Review