

EDUCATION

- **The Chinese University of Hong Kong** Hong Kong SAR
Ph.D. Student of Multi-Media Lab (MMLab), Information Engineering 2021 – 2025 (Expected)
- **Zhejiang University** Hangzhou, China
B.S. in Computer Science; GPA: 3.97/4.00. Rank: 1/154 2017 – 2021

RESEARCH INTERESTS

Computer Vision, Generative Modeling, Audio-Visual Learning, Virtual Human Generation & Rendering

MANUSCRIPTS

- **Audio-Driven Co-Speech Gesture Image Generation**
Xian Liu, Qianyi Wu, Hang Zhou, Yuanqi Du, Wayne Wu, Dahua Lin, Ziwei Liu
Preprint, Under Review.
- **ChemSpacE: Toward Steerable and Interpretable Chemical Space Exploration**
Yuanqi Du, Xian Liu, Shengchao Liu, Jieyu Zhang, Bolei Zhou
Preprint, Under Review.

CONFERENCE PUBLICATIONS

(* denotes equal contribution)

- **Semantic-Aware Implicit Neural Audio-Driven Video Portrait Generation**
Xian Liu, Yinghao Xu, Qianyi Wu, Hang Zhou, Wayne Wu, Bolei Zhou
European Conference on Computer Vision (**ECCV**), 2022.
- **Object-Compositional Neural Implicit Surfaces**
Qianyi Wu, Xian Liu, Yuedong Chen, Kejie Li, Chuanxia Zheng, Jianfei Cai, Jianmin Zheng
European Conference on Computer Vision (**ECCV**), 2022.
- **Unbiased Video Representation Learning with Decoupled Mutual Information Constraint**
Rui Qian, Shuangrui Ding, Xian Liu, Dahua Lin
European Conference on Computer Vision (**ECCV**), 2022.
- **Learning Hierarchical Cross-Modal Association for Co-Speech Gesture Generation**
Xian Liu, Qianyi Wu, Hang Zhou, Yinghao Xu, Rui Qian, Xinyi Lin, Xiaowei Zhou, Wayne Wu, Bo Dai, Bolei Zhou
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.
- **Visual Sound Localization in the Wild by Cross-Modal Interference Erasing**
Xian Liu*, Rui Qian*, Hang Zhou*, Di Hu, Weiyao Lin, Ziwei Liu, Bolei Zhou, Xiaowei Zhou
AAAI Conference on Artificial Intelligence (**AAAI**), 2022.
- **Enhancing Self-supervised Video Representation Learning via Multi-level Feature Optimization**
Rui Qian, Yuxi Li, Huabin Liu, John See, Shuangrui Ding, Xian Liu, Dian Li, Weiyao Lin
International Conference on Computer Vision (**ICCV**), 2021.
- **Motion Capture from Internet Videos**
Junting Dong, Qing Shuai, Yuanqing Zhang, Xian Liu, Xiaowei Zhou, Hujun Bao
European Conference on Computer Vision (**ECCV**), 2020. **(Oral Presentation, Top 2%)**

WORKSHOP PAPERS

- **ChemSpaceE: Toward Steerable and Interpretable Chemical Space Exploration**
Yuanqi Du, Xian Liu, Shengchao Liu, Jieyu Zhang, Bolei Zhou
ICLR 2022 Machine Learning for Drug Discovery Workshop, 2022.
- **Interpreting Molecular Space with Deep Generative Models**
Yuanqi Du, Xian Liu, Shengchao Liu, Jieyu Zhang, Bolei Zhou
ELLIS Machine Learning for Molecule Discovery Workshop, 2021. **(Oral Presentation)**

WORKING EXPERIENCE

- **Digital Content Group, Shanghai AI Laboratory** Shanghai, China
Research Intern Jul. 2021 - Feb. 2022
Topic: Audio-Visual Learning, Generative Modeling
- **Intelligent Video Group, SenseTime Research** Shanghai, China
Research Intern Aug. 2020 - Jun. 2021
Topic: Audio-Driven Talking Face Generation, Co-Speech Gesture Generation
- **Microsoft China** Beijing, China
Back-end Engineer Intern Jul 2019 - Sep 2019

PROFESSIONAL SERVICES

- **Conference Reviewer:** CVPR (2022), ECCV (2022), SIGGRAPH Asia (2022), NeurIPS (2022), ICML (2022), AAAI (2022).

SELECTED HONORS & AWARDS

- **National Scholarship** 2019, 2020
- **Hong Kong Ph.D. Fellowship Scheme (HKPFS)** 2021-2025
- **Outstanding Graduate, Zhejiang Province** 2021
- **Outstanding Bachelor Thesis Award of Zhejiang University, Top 1%** 2021
- **SenseTime Scholarship** 2020
- **Tang Lixin Scholarship** 2019
- **First Class Scholarship for Academic Excellence** 2019, 2020

TEACHING EXPERIENCE

- **Spring 2022:** ENGG 1120, Linear Algebra for Engineers.
- **Fall 2021:** ENGG 2440, Discrete Mathematics for Engineers.