Zhenyu Xie

Phone: 86-18819253799 | Email: xiezhy6@mail2.sysu.edu.cn | Citizenship: China

Research Interests

My research interests mainly lie in the **Fashion-centric Synthesis**, including but not limited to 2D/3D virtual try-on, 2D fashion model/clothes synthesis/editing, etc. Recently, I am focusing on exploring the low-cost solution for the task of 3D virtual try-on. My research goal is to facilitate the development of fashion community by using the computer vision algorithms.

Education

Sun Yat-sen University, China September 2020 - Present
Ph.D. candidate in School of Intelligent Systems Engineering
Advisor: Prof. *Xiandan Liang (https://lemondan.github.io)*

Sun Yat-sen University, China September 2018 - June 2020
M.S. in School of Computer Science and Engineering
Advisor: Prof. *Jianhuang Lai (https://cse.sysu.edu.cn/content/2498)*

Sun Yat-sen University, China September 2014 - June 2018
B.S. in School of Computer Science and Engineering
Advisor: Prof. *Xiaohua Xie (https://cse.sysu.edu.cn/content/2478)*

Academic Services

Organizer for CVPR 2020 Workshop on Human-centric Image/Video Synthesis. *https://vuhcs.github.io*

Academic Conference Reviewer: ICCV2021, CVPR2022, ECCV2022, CVPR2023, ICCV2023, NeurIPS2023

Teaching Assistant for Artificial Intelligence Experiment (2020-2021), Sun Yat-sen University

Selected Publications

[1] Zhenyu Xie, Zaiyu Huang, Xin Dong, Fuwei Zhao, Haoye Dong, Xijin Zhang, Feida Zhu, and Xiaodan Liang. GP-VTON: Towards General Purpose Virtual Try-on via Collaborative Local-Flow Global-Parsing, in the IEEE / CVF Computer Vision and Pattern Recognition Conference (**CVPR**), 2023.

[2] Zaiyu Huang, Hanhui Li, Zhenyu Xie, Michael Kampffmeyer, Qingling Cai, Xiaodan Liang. Towards Hard-pose Virtual Try-on via 3D-aware Global Correspondence Learning, in Conference on Neural Information Processing Systems (**NeurIPS**), 2022.

[3] Xujie Zhang, Yu Sha, Michael Kampffmeyer, Zhenyu Xie, Zequn Jie, Chengwen Huang, Jianqing Peng, Xiaodan Liang. ARMANI: Part-level Garment-Text Alignment for Unified Cross-Modal Fashion Design, in ACM International Conference on Multimedia (**ACMMM**), 2022.

[4] Xin Dong, Fuwei Zhao, Zhenyu Xie, Xijin Zhang, Kang Du, Min Zheng, Xiang Long, Xiaodan Liang Jianchao Yang. Dressing in the Wild by Watching Dance Videos, in the IEEE / CVF Computer Vision and Pattern Recognition Conference (**CVPR**), 2022.

[5] Zhenyu Xie, Zaiyu Huang, Fuwei Zhao, Haoye Dong, Michael Kampffmeyer, Xiaodan Liang. Towards Scalable Unpaired Virtual Try-On via Patch-Routed Spatially-Adaptive GAN, in Conference on Neural Information Processing Systems (**NeurIPS**), 2021.

[6] Fuwei Zhao, Zhenyu Xie, Michael Kampffmeyer, Haoye Dong, Songfang Han, Tianxiang Zheng, Tao Zhang, Xiaodan Liang. M3D-VTON: A Monocular-to-3D Virtual Try-On Network, in International Conference on Computer Vision (**ICCV**), 2021.

[7] Zhenyu Xie, Xujie Zhang, Fuwei Zhao, Haoye Dong, Michael Kampffmeyer, Haonan Yan, Xiaodan Liang. WAS-VTON: Warping Architecture Search for Virtual Try-on Network, in ACM International Conference on Multimedia (**ACMMM**), 2021.

[8] Bowen Wu, Zhenyu Xie, Xiaodan Liang Yubei Xiao, Haoye Dong, Liang Lin. Image Comes Dancing with Collaborative Parsing-Flow Video Synthesis, in IEEE Transactions on Image Processing (**TIP**), 2021.

[9] Haoye Dong, Xiaodan Liang, Yixuan Zhang, Xujie Zhang, Xiaohui Shen, Zhenyu Xie, Bowen Wu, Jian Yin. Fashion Editing with Adversarial Parsing Learning, in the IEEE / CVF Computer Vision and Pattern Recognition Conference (**CVPR**), 2020.

Invited Talks

VALSE Webniar, Online January 2022
A talk about scalable unpaired virtual try-on.
https://www.bilibili.com/video/BV18r4y1h7Q6/?vd_source=3ef1d5d137d4dc801d2bfda94ef1ecff