Hanyu Wang

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Education

University of Maryland – College Park — College Park, MD, US
Ph.D. in Computer Science; Advisor: Abhinav Shrivastava — *Aug. 2020 – Present*

University of Maryland – College Park — College Park, MD, US
M.S. in Computer Science; GPA: 3.94/4.0 — *Aug. 2018 – May 2020*

Xi'an Jiaotong University — Xi'an, China
B.Eng. in Computer Science and Technology; GPA: 3.9/4.0 — *Sept. 2014 – May 2018*

Interests

Deep learning and computer vision, including but not limited to generative models, representation learning, vision + language/other modalities, implicit neural representations, etc.

Internship Experience

Research Scientist Intern, **Meta** **2023**

- Mentors: Chenyang Zhang
- Exploring zero-shot text-to-video generation.
- Proposed utilizing pretrained image editing models to achieve smoother motions.

Research Intern, **Snap Inc.** **2021 - 2022**

- Mentors: Pengxiang Wu, Chen Wang, Kevin Dela Rosa
- Proposed the problem of multimodality-guided image style transfer.
- Addressed the challenge using a novel cross-modal GAN inversion approach I proposed.
- Explored multimodal multitask learning.

Research Intern, **Institute of Automation, CAS** **2017 - 2018**

- Mentors: Jianwei Guo, Dong-Ming Yan, Xiaopeng Zhang
- Proposed learning-based 3D keypoint descriptor.
- Validate the effectiveness of the proposed descriptor on the non-rigid shape matching task.

Publications

Hanyu Wang, Chenyang Zhang, Tian Xie, Haoyue Tang, Yang Bai, Abhinav Shrivastava
Zero-shot Text-to-video Generation with Motion-based Latent Optimization and Motion Generation.
Under Review

Hanyu Wang, Pengxiang Wu, Kevin S Dela Rosa, Chen Wang, Abhinav Shrivastava
Multimodality-guided Image Style Transfer using Cross-modal GAN Inversion.
WACV 2024

Nirat Saini*, **Hanyu Wang***, Archana Swaminathan, Vinoj Jayasundara, Bo He, Kamal Gupta, Abhinav Shrivastava
Chop & Learn: Recognizing and Generating Object-State Compositions.
ICCV 2023

Bo He, Xitong Yang, **Hanyu Wang**, Zuxuan Wu, Hao Chen, Shuaiyi Huang, Yixuan Ren, Ser-Nam Lim, Abhinav Shrivastava
Towards Scalable Neural Representation for Diverse Videos.
CVPR 2023

Shishira R Maiya*, Sharath Girish*, Max Ehrlich, **Hanyu Wang**, Kwot Sin Lee, Patrick Poirson, Pengxiang Wu, Chen Wang, Abhinav Shrivastava
NIRVANA: Neural Implicit Representations of Videos with Adaptive Networks and Autoregressive Patch-wise Modeling.
CVPR 2023

Hanyu Wang, Kamal Gupta, Larry Davis, Abhinav Shrivastava
Neural Space-filling Curves.
ECCV 2022

Hao Chen, Bo He, **Hanyu Wang**, Yixuan Ren, Ser Nam Lim, Abhinav Shrivastava
NeRV: Neural Representations for Videos.
NeurIPS 2021

Jianwei Guo, **Hanyu Wang**, Zhanglin Cheng, Xiaopeng Zhang, Dong-Ming Yan
Learning Local Shape Descriptors for Computing Non-rigid Dense Correspondence.
Computational Visual Media 2020.

Hanyu Wang*, Jianwei Guo*, Dong-Ming Yan, Weize Quan, Xiaopeng Zhang
Learning 3D Keypoint Descriptors for Non-Rigid Shape Matching.
ECCV 2018.

Academic Services

CVPR 2024, WAVC 2024, ICCV 2023, CVPR 2023, CVPR 2022, ECCV 2022 reviewer.

Technical Skills

Languages: Python, C/C++, MATLAB, Java, C#, etc.
Frameworks & Libraries: Pytorch, Tensorflow, Numpy, Jupyter, etc.