Jinpeng LIU

Final-year M.S. Student Data Science, Tsinghua University ↑ Homepage: https://moonsliu.github.io/ ➤ Email: liujp22@mails.tsinghua.edu.cn **८** Mobile: (+86) 188-3928-9598 ☑ GitHub

EDUCATION

Tsinghua University

M.S. Student of Computer Science

P.R. China 09/2022 - now

Supervisor: Prof. Yansong Tang Service: Leader of Multimodal Generation and Interaction Group

Research: 3D Object & Motion Generation

Sun Yat-sen University

Bachelor of Intelligent Science and Technology

P.R. China 09/2018 - 09/2022

Research: Medical Imaging

Publications and preprints

NovelGS: Consistent Novel-view Denoising via Large Gaussian Reconstruction Model. Jinpeng Liu, Jiale Xu, Weihao Cheng, Yiming Gao, Xintao Wang, Ying Shan, Yansong Tang.

Posture, Plan and Go: Towards Open-world Motion Generation. Jinpeng Liu, Wenxun Dai, Chunyu Wang, Yiji Cheng, Yansong Tang, Xin Tong. [paper] | [project page]

3D Generation LLMs Diffusion

• FLAG3D: A 3D Fitness Activity Dataset with Language Instruction.

Jinpeng Liu*, Yansong Tang*, Aoyang Liu*, Bin Yang, Wenxun Dai, Yongming Rao, Jiwen Lu, Jie Zhou, Xiu Li.

CVPR 2023 [paper] | [code] | [project page]

3D Generation Video Understanding 3D Generation Video Understanding

FLAG3D++: A Benchmark for 3D Fitness Activity Comprehension with Language Instruction. Yansong Tang, Aoyang Liu, Jinpeng Liu, Shiyi Zhang, Wenxun Dai, Jie Zhou, Xiu Li, Jiwen Lu. 3D Generation Video Understanding Under Review TPAMI [code]

 MotionLCM: Realtime Controllable Motion Generation via Latent Consistency Model. Wenxun Dai, Ling-Hao Chen, Jingbo Wang, Jinpeng Liu, Bo Dai, Yansong Tang.

ECCV 2024 [paper] | [code] | [project page]

Toward robust diagnosis: A Contour Attention Preserving Adversarial Defense for COVID-19 detection. Kun Xiang, Xing Zhang, Jinwen She, Jinpeng Liu, Haohan Wang, Shiqi Deng, Shancheng Jiang.

AAAI 2023 [paper] | [code]

Medical Imag Medical Image

• A universal diagnosis system for cross-regional skin lesion recognition using deep graph-based network. Jinwen She, Jinpeng Liu, Shancheng Jiang, Ran Xiao, and Gang Qu, et. al.

Under Review Nat Commun [paper] | [code]

Medical Image

HIGHTLIGHT OPEN-SOURCE PROJECT

• InstantMesh: Efficient 3D Mesh Generation from a Single Image 🖸 Jinpeng Liu (Core Contributor), and Tencent ARC Contributors

3.3k star at Github

Professional Experience

The University of Texas at Austin Focus on human mesh recovery in the world coordinate system

7/2024 - now

USA

Supervisor: Dr. Georgios Pavlakos, and Dr. Qixing Huang

Tencent Applied Research Center (ARC Lab) Focus on 3D object generation

P.R. China 12/2023 - 12/2024 (expected)

Supervisor: Dr. Xintao Wang, and Dr. Ying Shan

Microsoft Research Asia (MSR Asia)

Focus on human motion generation

 $_{3/2021}$ - $_{11/2023}$

Supervisor: Dr. Chunyu Wang, and Dr. Xin Tong

Honors and Awards

• Jintan Second Prize Scholarship of Tsinghua University (top 10%)

Nov. 2023

• Second Prize Scholarship of SYSU (top 15%)

Nov. 2021

• Third Prize Scholarship of SYSU (top 30%)

Nov. 2019

Academic Service

- Programming Languages: Python, MATLAB, Shell, LATEX, C++/C, HTML
- Programming Tools: Git, PyTorch, Docker, Linux Ops, Vim

Academic Service

• Conference Reviewer or PC Member:

- o IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR): 2024-2025
- International Conference on Learning Representations (ICLR): 2024
- Annual AAAI Conference on Artificial Intelligence (AAAI): 2025
- The IEEE International Conference on Automatic Face and Gesture Recognition (FG): 2023