# 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

P.R. China 09/2022 - now

M.S. Student of Computer Science 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

## 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. Under Review [paper]

• 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.

Under Review TPAMI [code]

3D Generation Video Understanding

#### Publications

• 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. Yansong Tang\*, Jinpeng Liu\*, Aoyang Liu\*, Bin Yang, Wenxun Dai, Yongming Rao, Jiwen Lu, Jie Zhou, Xiu Li. CVPR 2023 [paper] | [code] | [project page] 3D Generation Video Understanding

• 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]

3D Generation Diffusion

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. [paper] | [code] **AAAI 2023** 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

USA 7/2024 - now

Focus on human mesh recovery in the world coordinate system 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

P.R. China 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:

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