JINPENG LIU

EMAIL | WEBSITE | GITHUB | LINKEDIN

EDUCATION

Tsinghua University (THU) | GPA: 3.8 of 4.0

M.E. | Data Science and Information Technology (expected June 2025)

Sept. 2022 - Present Beijing, China

Sun Yat-sen University (SYSU) | GPA: 3.6 of 4.0

B.S. | Intelligent Science and Technology

Sept. 2018 - June. 2022 Guangzhou, China

PUBLICATIONS AND PREPRINTS

3D Generation

- [1] **Jinpeng Liu***, Wenxun Dai*, Chunyu Wang*, Yiji Cheng, Yansong Tang, Xin Tong. Posture, Plan and Go: Towards Open-world Motion Generation. **In** *ECCV* **2024** [Paper] [Project Page]
- [2] **Jinpeng Liu**, et al. DMVGS: Denoising Multi-View Diffusion using 3D Large Gaussian Reconstruction Model. (It will be available soon)
- [3] Wenxun Dai, Ling-Hao Chen, Jingbo Wang, **Jinpeng Liu**, Bo Dai, Yansong Tang. MotionLCM: Real-time Controllable Motion Generation via Latent Consistency Model. **In** *ECCV* **2024**[Paper] [Code] [Project Page]

Video Understanding

- [3] Jinpeng Liu*, Yansong Tang*, Aoyang Liu*, Bin Yang, Wenxun Dai, Yongming Rao, Jiwen Lu, Jie Zhou, Xiu Li. FLAG3D: A 3D Fitness Activity Dataset with Language Instruction. In *CVPR*, 2023 [Paper] [Code] [Project Page]
- [4] Yansong Tang, Aoyang Liu, **Jinpeng Liu**, Shiyi Zhang, Wenxun Dai, Jie Zhou, Xiu Li, Jiwen Lu. FLAG3D++: A Benchmark for 3D Fitness Activity Comprehension with Language Instruction. In Submission to TPAMI [Code]

Medical Imaging

- [5] Kun Xiang, Xing Zhang, Jinwen She, **Jinpeng Liu**, Haohan Wang, Shiqi Deng, Shancheng Jiang. Toward robust diagnosis: a contour attention preserving adversarial defense for COVID-19 detection. **In AAAI 2023** [Paper] [Code]
- [6] Jinwen She, **Jinpeng Liu**, Haiqiong Yang, Linlin Peng, Mingxin Li, Xing Zhang, Shancheng Jiang, Ran Xiao, and Gang Qu. A universal computer-aided diagnosis system for cross-regional skin lesion recognition using deep graph-based network. Under review 2023.

(* indicates equal contribution.)

Professional Experience

Tencent Applied Research Center (ARC Lab)

Mentor: Dr. Xintao Wang Advisor: Dr. Ying Shan

Dec. 2023 - Present Shenzhen, China

• Focus on 3D object generation

Microsoft Research Asia (MSR Asia)

Mentor: Dr. Chunyu Wang Advisor: Dr. Xin Tong

Mar. 2023 - Nov. 2023 Beijing, China

- Researched the open-vocabulary text to motion generation models.
- Designed a divide-and-conquer framework to transfer the task from the motion space to pose space.
- Validated the effectiveness via extensive experiments, formed a research paper.

AWARDS AND HONORS

Scholarship

Jintan Second Prize Scholarship of THU (top 10%)

Second Prize Scholarship of SYSU (top 15%)

Third Prize Scholarship of SYSU (top 30%)

Nov. 2021

Nov. 2019

PROFESSINOAL SKILLS

Programming Languages: Python | MATLAB | Shell | LATEX | C++/C | HTML

Programming Tools: Git | PyTorch | Docker | Linux Ops | Vim

ACADEMIC ACTIVITIES

Reviewer of:

- The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) '{24}
- The IEEE International Conference on Automatic Face and Gesture Recognition (FG) '{23}

MISCELLANEOUS

- Github: https://github.com/moonsliu
- Academic Page: https://moonsliu.github.io/
- $\bullet \ \ Google \ Scholar: \ https://scholar.google.com/citations?user=yu4MHUsAAAAJ\&hl=en$
- Linkedin: https://www.linkedin.com/in/jinpeng-liu-1607722a6/