Jinpeng Liu

Email | Website | GitHub | LinkedIn

Education

Tsinghua University (THU) | *GPA: 3.8 of 4.0* — *Sept. 2022 - Present*
M.E. | *Data Science and Information Technology (expected June 2025)* — *Beijing, China*

Sun Yat-sen University (SYSU) | *GPA: 3.6 of 4.0* — *Sept. 2018 - June. 2022*
B.S. | *Intelligent Science and Technology* — *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] 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) — *Dec. 2023 - Present*
Mentor: Dr. Xintao Wang *Advisor: Dr. Ying Shan* — *Shenzhen, China*

- Focus on 3D object generation

Microsoft Research Asia (MSR Asia) — *Mar. 2023 - Nov. 2023*
Mentor: Dr. Chunyu Wang *Advisor: Dr. Xin Tong* — *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%) — *Nov. 2023*
Second Prize Scholarship of SYSU (top 15%) — *Nov. 2021*
Third Prize Scholarship of SYSU (top 30%) — *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/
- Google Scholar: https://scholar.google.com/citations?user=yu4MHUsAAAAJ&hl=en
- Linkedin: https://www.linkedin.com/in/jinpeng-liu-1607722a6/