Jinpeng LIU

Final-year M.S. Student
Data Science, Tsinghua University

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EDUCATION

- **Tsinghua University** — P.R. China
  M.S. Student of Computer Science — 09/2022 - now
  Supervisor: Prof. Yansong Tang   Service: Leader of Multimodal Generation and Interaction Group
  Research: 3D Object & Motion Generation
- **Sun Yat-sen University** — P.R. China
  Bachelor of Intelligent Science and Technology — 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]   `3D Generation` `Diffusion`
- **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.
  ECCV 2024   [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`
- **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.
  AAAI 2023   [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** — USA
  Focus on human mesh recovery in the world coordinate system — 7/2024 - now
  Supervisor: Dr. Georgios Pavlakos, and Dr. Qixing Huang
- **Tencent Applied Research Center (ARC Lab)** — P.R. China
  Focus on 3D object generation — 12/2023 - 12/2024 (expected)
  Supervisor: Dr. Xintao Wang, and Dr. Ying Shan
- **Microsoft Research Asia (MSR Asia)** — P.R. China
  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**:
  - The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR): 2024-2025
  - The International Conference on Learning Representations (ICLR): 2024
  - The Annual AAAI Conference on Artificial Intelligence (AAAI): 2025
  - The IEEE International Conference on Automatic Face and Gesture Recognition (FG): 2023