Xiangjun Tang

xiangjun.tang@outlook.com | Solve real-world problems | https://yuyujunjun.github.io/

Experience

Post-doctoral Position — Thuwal, Saudi Arabia
Working with Prof. Peter Wonka at King Abdullah University of Science and Technology (KAUST) — Sep. 2024 - now

Ph.D. in Electronic Information — Hangzhou, China
Advised by Xiaogang Jin in State Key Lab of CAD&CG, Zhejiang University — Sep. 2020 - Exp. Jun. 2024

M.S. in Computer Science and Technology — Hangzhou, China
Advised by Xiaogang Jin in State Key Lab of CAD&CG, Zhejiang University — Sep. 2019 - Jun. 2020

B.S. in Digital Media — Hangzhou, China
Zhejiang University — Sep. 2015 - Jun. 2019

Awards and Honors

Dec. 2023 **Graduate with Merit A Performance** from Zhejiang University
Aug. 2023 **Style3D Graduate Fellowship** from Linctex Digital Co., LTD.
Dec. 2022 **Graduate of Merit/Triple A Graduate** from Zhejiang University, 2^{nd} Honours
Dec. 2021 **Award of Honor for Graduate** from Zhejiang University
Dec. 2018 **National Scholarship** from Ministry of Education of the People's Republic of China, 1^{st} Honour

Research Projects

Geometry Generation — KAUST GenAI — 2024-present

- Proposed generative human geometry distribution, a new generative representation that can synthesize high-fidelity avatars with realistic clothing details, including loose parts.

Motion Generation — Zhejiang University — 2021-2024

- Proposed a method for generating high-quality in-between motions with varying target frames and durations in real-time.
- Led a colleague in proposing a fast, versatile, and controllable method for generating high-quality in-between styled motion online.
- Led a colleague to decouple contact from motion for fine-grained motion style transfer, improving the quality and controllability.

Vulkan based Cross-platform Particle System Engine — Zhejiang University — 2020-2021

- Led two colleagues in building an animation and rendering engine for a particle system, running efficiently on resource-constrained platforms.
- The system includes collision avoidance, group animation, application of external forces based on point cloud and SDF, keyframe attribute editing, and has been commercially deployed on Oppo phones.

Parametric Facial Editing — Zhejiang University — 2019-2021

- Contributed, as a part of a team, to automatically adjust the proportion of input portrait while retaining personal facial features. My responsibilities included 3D to 2D projection, image warping, and optimization for background distortion removal.
- Led a colleague in presenting a parametric method to efficiently reshape a portrait in videos, producing a smooth, retouched outcome.

Virtual Reality — Zhejiang University — 2018-2019

- Proposed a novel shape-constrained fireworks simulation method with rich textures in an HMD virtual environment using sketched feature lines as input.
- Proposed a novel VR modeling tool that uses volume skeleton-based convolution surfaces. It enables the user to draw with arbitrarily shaped brushed and generate 3D manifold objects by fusing the brushed primitives.

First-authored Publications

Decoupling Contact for Fine-Grained Motion Style Transfer — SIGGRAPH ASIA
SA '24: SIGGRAPH Asia 2024 Conference Papers — 2024

- **Xiangjun Tang**, Linjun Wu, He Wang, Yiqian Wu, Bo Hu, Songnan Li, Xu Gong, Yuchen Liao, Qilong Kou, Xiaogang Jin.

RSMT: Real-time Stylized Motion Transition for Characters SIGGRAPH

SIGGRAPH '23 Conference Proceedings, Los Angeles, 6-10 August, 2023. 2023

- **Xiangjun Tang**, Linjun Wu, He Wang, Bo Hu, Xu Gong, Yuchen Liao, Songnan Li, Qilong Kou, and Xiaogang Jin.
- Project Page: *yuyujunjun.github.io/publications/Siggraph2023_RSMT/*
- Source Code: *github.com/yuyujunjun/RSMT-Realtime-Stylized-Motion-Transition*

Real-time Controllable Motion Transition for Characters ACM TOG

ACM Transactions on Graphics (Proc. Siggraph 2022), 2022, 41(4): Article No.: 137. 2022

- **Xiangjun Tang**, He Wang, Bo Hu, Xu Gong, Ruifan Yi, Qilong Kou, and Xiaogang Jin.
- Project Page: *yuyujunjun.github.io/publications/TOG2022_Transition*

Parametric Reshaping of Portraits in Videos ACM MM (Oral)

Proceedings of the 29th ACM International Conference on Multimedia, 4689-4697. 2021

- **Xiangjun Tang**, Wenxin Sun, Yong-Liang Yang, and Xiaogang Jin.
- Project Page: *yuyujunjun.github.io/publications/ACMMM2021_Reshaping_Videos/*

Selected Additional Publications

Semantically Consistent Text-to-Motion with Unsupervised Styles SIGGRAPH

ACM SIGGRAPH 2025 (Conference Track) 2025

- Linjun Wu, **Xiangjun Tang**, Jingyuan Cong, He Wang, Bo Hu, Xu Gong, Songnan Li, Yuchen Liao, Yiqian Wu, Chen Liu, Xiaogang Jin*.

StyleTex: Style Image-Guided Texture Generation for 3D Models ACM TOG

ACM Transactions on Graphics (TOG), Volume 43, Issue 6, Article No.: 212, Pages 1 - 14 2024

- Zhiyu Xie, Yuqing Zhang, **Xiangjun Tang**, Yiqian Wu, Dehan Chen, Gongsheng Li, Xiaogang Jin.

Portrait3d: Text-guided High-quality 3d Portrait Generation using Pyramid Representation and GANs Prior ACM TOG

ACM Transactions on Graphics (TOG), Volume 43, Issue 4, Article No.: 45, Pages 1 - 12 2024

- Yiqian Wu, Hao Xu, **Xiangjun Tang**, Xien Chen, Siyu Tang, Zhebin Zhang, Chen Li, Xiaogang Jin.

3DBrushVR: From Virtual Reality Primitives to Complex Manifold Objects ISMAR-Adjunct

IEEE International Symposium on Mixed and Augmented Reality Adjunct, 2022. 2022

- Yuzhen Zhu, **Xiangjun Tang**, Jing Zhang, Ye Pan, Jingjing Shen, Xiaogang Jin.

Deep Shapely Portrait ACM MM

Proceedings of the 28th ACM International Conference on Multimedia, 1800-1808. 2020

- Qinjie Xiao, **Xiangjun Tang**, You Wu, Leyang Jin, Yong-Liang Yang, and Xiaogang Jin.

Presentations

Motion Synthesis from My Perspective

- Invited talk by Mihoyo, Aug, 2023.

Real-time, High-quality and Stylized In-between Motion Generation

- Style 3D Open Day - Scholarship Certification and Communication Conference, Aug, 2023.

RSMT: Real-time Stylized Motion Transitions for Characters

- SIGGRAPH Technique Paper Session, Aug, 2023.
- CSIG SIGGRAPH Preview Presentations, Jul, 2023.

Parametric Reshaping of Portraits in Videos

- 29th ACM MM, Oct, 2021.

Technical Skills

Graphics API	Vulkan, OpenGL, Unity3D Engine, GPU-based Programming (Cuda, Compute Shader)
Programming	C++, Python
Research background	Generative AI, Human Motion, Geometry, VR