# Xiangjun Tang

# Experience \_\_\_\_

**Post-doctoral Fellow** Working with Prof. Peter Wonka at King Abdullah University of Science and Technology (KAUST)

### Ph.D. in Electronic Information

Advised by Xiaogang Jin in State Key Lab of CAD&CG, Zhejiang University

### M.S. in Computer Science and Technology

Advised by Xiaogang Jin in State Key Lab of CAD&CG, Zhejiang University

### **B.S. in Digital Media**

Zhejiang University

## 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 <sup>st</sup> Honour

# Research Projects \_\_\_\_\_

### **Geometry Generation**

· Proposed a diffusion-based 3D human geometry generation method, which introduces a novel geometry representation capable of synthesizing high-fidelity geometries with realistic clothing details, including challenging loose parts.

### **Motion Generation**

- Proposed a high-quality motion in-between system adopted by Tencent, reducing manual effort and supporting real-time deployment.
- · Led a colleague to incorporate the style control into the in-between system, extending its usability across animation scenarios.
- · Developed a fine-grained motion editing framework with precise control over trajectory, contact, and style, enhancing the animation toolset.

### Vulkan-based Cross-platform Particle System Engine

• Led two colleagues to develop a particle simulation, animation, and rendering engine tailored to Oppo's design requirements, optimized for resource-constrained platforms.

### **Parametric Facial Editing**

- · Led a colleague in developing a video editing method for efficient portrait reshaping, achieving smooth and natural retouching results.
- · Contributed to a portrait reshaping pipeline, with key contributions in 3D projection, semantic warping, and distortion-aware optimization.

### Virtual Reality

- Designed a VR modeling tool based on convolution surfaces, enabling real-time mesh generation with efficient GPU acceleration.
- · Proposed a shape-constrained fireworks simulation method with rich textures in an HMD-based VR environment.

# First-authored Publications

### **Generative Human Geometry Distribution**

Preprint

• Xiangjun Tang, Biao Zhang, Peter Wonka.

### **Decoupling Contact for Fine-Grained Motion Style Transfer**

SA '24: SIGGRAPH Asia 2024 Conference Papers

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

Thuwal, Saudi Arabia Sep. 2024 - now

Hangzhou, China Sep. 2020 - Exp. Jun. 2024

> Hangzhou, China Sep. 2019 - Jun. 2020

> Hangzhou, China Sep. 2015 - Jun. 2019

KAUST GenAI 2024-present

Zhejiang University 2021-2024

Zhejiang University 2020-2021

Zhejiang University 2019-2021

Zhejiang University 2018-2019

> Preprint 2025

SIGGRAPH ASIA 2024

RSMT: Real-time Stylized Motion Transition for Characters		
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.		
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.		
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.		

## 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, Xia	logang 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 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 IS	MAR-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	
Proceedings of the 28th ACM International Conference on Multimedia, 1800-1808.	
• 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