Xiangjun Tang

Education _

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 _____

Aug. 2023	Style3D Graduate Fellowship from Linctex Digital Co., L	TD.
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- 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, 1st Honour

Research Projects _____

Motion Generation

Zhejiang University 2021-present

- Proposed a method for generating high-quality in-between motions with varying target frames and durations.
- · Led a junior colleague in proposing a fast, versatile, and controllable method for generating high-quality in-between styled motion online.
- · Explored with a junior colleague to generate high-quality motion style transfer results based on an unlabelled dataset.

Vulkan based Cross-platform Particle System Engine

Zhejiang University 2020-2021

- Led two junior colleagues in building an animation and rendering engine for a particle system.
- 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 junior 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

RSMT: Real-time Stylized Motion Transition for Characters

SIGGRAPH

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

TOG 2022

2023

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

- 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

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/

Additional Publications _

3DBrushVR: From Virtual Reality Primitives to Complex Manifold Objects

ISMAR-Adjunct

ACM MM (Oral)

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

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

Efficient Real-time Dynamic Diffuse Global Illumination using Signed Distance Fields

VC 2021

The Visual Computer, 2021.

· Jinkai Hu, Milo K Yip, Guillermo Elias Alonso, Shihao Gu, Xiangjun Tang, Xiaogang Jin.

Wowtao: A Personalized Pottery-Making System

Comput Ind

Computers in Industry, 2021.

2021

· Ruifan Cai, Yingying Lin, Honglin Li, Yuzhen Zhu, Xiangjun Tang, Yanjun Weng, Lihua You, 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.

Sketch-based Shape-constrained Fireworks Simulation in Head-Mounted Virtual Reality

CAVW

Computer Animation and Virtual Worlds, 2020.

2020

• Xiaoyu Cui, Ruifan Cai, Xiangjun Tang, Zhigang Deng, 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.

Professional Activities _____

Reviewer for

- · Transactions on Graphics 2023
- · SIGGRAPH Asia 2023
- · CGI 2023

Technical Skills ____

Vulkan, OpenGL, Unity3D Engine, GPU-based Programming (Cuda, Compute Shader)

Programming C++, Python

Referees _

· Prof. Xiaogang Jin

Ph. D, Professor, at State Key Lab of CAD&CG, Zhejiang University, Hangzhou 310058, P. R. China