

TIANYU WANG

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<https://wtyatzoo.github.io/> ◇ <https://github.com/WTYatzoo/>

BIOGRAPHY

Tianyu is currently a graphics researcher at miHoYo, working in the area of animation control. His research results have been the core of the automatic (or semi-automatic) in-between frame generation of dynamic bone chains for garment animation in *Genshin Impact*, *Honkai: Star Rail*, etc. He got his M.Eng. degree from Zhejiang University, advised by Prof. Jin Huang, and his B.Eng. degree from Sichuan University. After graduation, he joined FaceUnity as a senior R&D engineer, then an adjunct research assistant at Zhejiang Sci-Tech University and an independent researcher. His current research interests include: **(a) physically based differentiable simulation; (b) inverse problems in fabrication and design; and (c) human digitization.**

EDUCATION

Zhejiang University, Hangzhou, China

M.Eng. in Computer Science

Sept. 2016 - Mar. 2020

Sichuan University, Chengdu, China

B.Eng. in Computer Science

Advisor: Prof. Jin Huang

Sept. 2012 - Jun. 2016

PUBLICATION

Tianyu Wang, Jiong Chen, Dongping Li, Xiaowei Liu, Huamin Wang, Kun Zhou

Fast GPU-Based Two-Way Continuous Collision Handling

ACM Transactions on Graphics 42(5)(presented at SIGGRAPH, Los Angeles, US, 2023)

Chongyao Zhao, Jinkeng Lin, **Tianyu Wang**, Hujun Bao, Jin Huang

Efficient and Stable Simulation of Inextensible Cosserat Rods by a Compact Representation

Computer Graphics Forum 41(7)(PG, Kyoto, Japan, 2022)

Tianyu Wang

Shallow Water Equation Simulation's Super-Resolution using GAN

Master Thesis at Zhejiang University, 2020

Jiong Chen, Hujun Bao, **Tianyu Wang**, Mathieu Desbrun, Jin Huang

Numerical Coarsening using Discontinuous Shape Functions

ACM Transactions on Graphics 37(4)(SIGGRAPH, Vancouver, Canada, 2018)

R&D EXPERIENCE

Graphics Researcher, miHoYo Co., Ltd, Shanghai

Jun. 2023 - Now

Adjunct Research Assistant, Zhejiang Sci-Tech University

Jun. 2022 - Feb. 2023

Senior R&D Engineer, FaceUnity Technology Co., Ltd, Hangzhou

May 2020 - Sept. 2021

R&D Intern, Xmov Technology Co., Ltd, Shanghai

Sept. 2019 - Jan. 2020

Research Assistant, State Key Lab of CAD&CG, ZJU

Sept. 2016 - Mar. 2020

INVITED TALKS

Graphics And Mixed Environment Seminar (GAMES)

Oct. 26, 2023

Topic: Fast GPU-Based Two-Way Continuous Collision Handling [Recording (Chinese)]

ACADEMIC SERVICE

Journal Reviewer:

SIAM Journal on Scientific Computing (2023)

HONORS AND AWARDS

Graduate of Merit/Triple A graduate, Zhejiang University, 2018

Award of Honor for Graduate, Zhejiang University, 2018

Wen Chixiang Scholarship, Zhejiang University, 2018

Silver Medal, ACM-ICPC China Provincial Programming Contest, Chengdu Site, 2013 and 2014

2nd University Scholarship, Sichuan University, 2013

SKILLS

English

TOEFL score: 102 (R:29 L:24 S:21 W:28)

Programming Languages

C, C++, Python

Main Toolkit

CUDA, Eigen, NumPy, Tensorflow, PyQt, OpenGL, L^AT_EX, Git

Software

ParaView, MeshLab, Maya, Blender, Origin, Office