

# TIANYU WANG

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<https://wtyatzoo.github.io/>  $\diamond$  <https://github.com/WTYatzoo/>

## BIOGRAPHY

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Tianyu was a graphics researcher at miHoYo, mainly working in the area of animation control. His research results have been the core of the automatic (or semi-automatic) in-betweening generation of dynamic bone chain for garment animation in *Genshin Impact*. 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

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**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

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**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

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**Graphics Researcher, miHoYo Co., Ltd, Shanghai**

*Jun. 2023 - Dec. 2024*

**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

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**Graphics And Mixed Environment Seminar (GAMES)**

*Oct. 26, 2023*

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

## ACADEMIC SERVICE

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**Journal Reviewer:**

SIAM Journal on Scientific Computing (2023)

## HONORS AND AWARDS

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**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

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**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<sup>A</sup>T<sub>E</sub>X, Git

**Software**

ParaView, MeshLab, Maya, Blender, Origin, Office