Yihui Ma

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EDUCATION

Master Degree in Computer Science, ShanghaiTech University Sep 2019 – Jun 2022

Advisor: Prof. Xiaopei Liu

Bachelor Degree in Aircraft Design and Engineering, Northwestern Polytechnical University Sep 2015 – Jun 2019

Advisor: Prof. Shuhui Bu

PUBLICATIONS

• Hybrid LBM-FVM Solver for Two-Phase Flow Simulation

Yihui Ma, Xiaoyu Xiao, Wei Li, Mathieu Desbrun, and Xiaopei Liu. (Journal of Computational Physics, 2024)

• Efficient Kinetic Simulation of Two-Phase Flows

Wei Li, Yihui Ma, Xiaopei Liu, and Mathieu Desbrun. (ACM Transactions on Graphics, SIGGRAPH, 2022)

RESEARCH EXPERIENCE

FLARE Lab, ShanghaiTech University,

July 2019-Jun 2022

- Advisor: Xiaopei Liu
- Fluid Simulation in Computer Graphics and Computational Physics:
 - 1. Single-phase and multi-phase of fluid simulation.
 - 2. Fluid-structure interaction / fluid-solid coupling.
 - 3. Machine learning with fluid simulation.

WORK EXPERIENCE

Timi Studio, Tencent July 2022–Present

- Position: Game Developer
 - 1. Write codes of game play using Unreal Engine, Unity and Cocos Editor.
 - 2. Performance optimization of game engines.
 - 3. Research of cloth simulation of chaos library in Unreal Engine.
 - 4. Procedural Content Generation of terrain in game map using Houdini.

Timi Studio, Tencent July 2021-Oct 2021

- Position: Game Developer Intern
 - 1. Research on Procedural Content Generation

HONORS

Honored Graduate of Northwestern Polytechnical University	2019
3 rd Prize Innovation and Entrepreneurship of MIIT.	2017 - 2018
Outstanding Undergraduate Scholarship. (3 times)	2015 - 2016, 2016 - 2017, 2017 - 2018
Guangdong, Hong Kong and Macau Scholarships.	2016 - 2017
"Wu Yajun" 3 rd special scholarship.	2015 - 2016

COMPETITIONS

The 20th "Dawang Cup" National Robot Championship Obstacle Race Champion	2018
Honorable Mention in Mathematical Contest In Modeling/Interdisciplinary Contest In Modeling	
Two humanoid competitive robot championships in the 2017 China Robot and Artificial Intelligence Competition	2017
International third place/first prize in the 21st FIRA Robot World Cup	2016

English-Language Proficiency

IELTS Overall Band Score: 6.5

• Listening: 6.0 Reading: 7.5 Writing: 6.0 Speaking: 5.5