

# Yihui Ma

+86 13914029161 | [yihuimacn@gmail.com](mailto:yihuimacn@gmail.com) | [Homepage](#) | [Google Scholar](#)

## EDUCATION

<b>Master Degree in Computer Science, ShanghaiTech University</b>	Sep 2019 – Jun 2022
Advisor: Prof. <a href="#">Xiaopei Liu</a>	
<b>Bachelor Degree in Aircraft Design and Engineering, Northwestern Polytechnical University</b>	Sep 2015 – Jun 2019
Advisor: Prof. <a href="#">Shuhui Bu</a>	

## 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

<b>FLARE Lab, ShanghaiTech University,</b>	July 2019–Jun 2022
<ul style="list-style-type: none"><li>Advisor: <a href="#">Xiaopei Liu</a></li><li>Fluid Simulation in Computer Graphics and Computational Physics:<ol style="list-style-type: none"><li>Single-phase and multi-phase of fluid simulation.</li><li>Fluid-structure interaction / fluid-solid coupling.</li><li>Machine learning with fluid simulation.</li></ol></li></ul>	

## WORK EXPERIENCE

<b>Timi Studio, Tencent</b>	July 2022–Present
<ul style="list-style-type: none"><li>Position: <i>Game Developer</i><ol style="list-style-type: none"><li>Write codes of gameplay using Unreal Engine, Unity and Cocos Editor.</li><li>Performance optimization of game engines.</li><li>Research of cloth simulation of chaos library in Unreal Engine.</li><li>Procedural Content Generation of terrain in game map using Houdini.</li></ol></li></ul>	
<b>Timi Studio, Tencent</b>	July 2021-Oct 2021
<ul style="list-style-type: none"><li>Position: <i>Game Developer Intern</i><ol style="list-style-type: none"><li>Research on Procedural Content Generation.</li></ol></li></ul>	

## HONORS

Honored Graduate of Northwestern Polytechnical University	2019
3 <sup>rd</sup> 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 <sup>rd</sup> 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	2018
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