

# TIANQI LIU

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## SHORT BIO

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I am a second-year (2023.09-) master's student in Artificial Intelligence at Huazhong University of Science and Technology (HUST), supervised by Prof. [Zhiguo Cao](#). Currently, I am fortunate to be a visiting student at [MMLAB@NTU](#), advised by Prof. [Ziwei Liu](#). Before that, I received my bachelor's degree from HUST in 2023. My current research interests is 3D / 4D reconstruction and generation.

## EDUCATION

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### Huazhong University of Science and Technology

2023 – Present

*Master student in Artificial Intelligence*

GPA: 95.22/100, Rank: 1<sup>st</sup>/90

### Huazhong University of Science and Technology

2019 – 2023

*B.S. in Artificial Intelligence and Automation*

GPA: 93.40/100, Rank: 1<sup>st</sup>/79

## PUBLICATIONS

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- MVSGaussian: Fast Generalizable Gaussian Splatting Reconstruction from Multi-View Stereo  
**Tianqi Liu**, Guangcong Wang, Shoukang Hu, Liao Shen, Xinyi Ye, Yuhang Zang, Zhiguo Cao, Wei Li, Ziwei Liu  
*European Conference on Computer Vision (ECCV)*, 2024
- Geometry-aware Reconstruction and Fusion-refined Rendering for Generalizable Neural Radiance Fields  
**Tianqi Liu**, Xinyi Ye, Min Shi, Zihao Huang, Zhiyu Pan, Zhan Peng, Zhiguo Cao.  
*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024
- When Epipolar Constraint Meets Non-local Operators in Multi-View Stereo  
**Tianqi Liu**, Xinyi Ye, Weiyue Zhao, Zhiyu Pan, Min Shi, Zhiguo Cao.  
*IEEE/CVF International Conference on Computer Vision (ICCV)*, 2023
- DreamMover: Leveraging the Prior of Diffusion Models for Image Interpolation with Large Motion  
Liao Shen, **Tianqi Liu**, Huiqiang Sun, Xinyi Ye, Baopu Li, Jianming Zhang, Zhiguo Cao  
*European Conference on Computer Vision (ECCV)*, 2024
- Constraining Depth Map Geometry for Multi-View Stereo: A Dual-Depth Approach with Saddle-shaped Depth Cells  
Xinyi Ye, Weiyue Zhao, **Tianqi Liu**, Zihao Huang, Zhiguo Cao, Xin Li  
*IEEE/CVF International Conference on Computer Vision (ICCV)*, 2023
- 3D Multi-frame Fusion for Video Stabilization  
Zhan Peng, Xinyi Ye, Weiyue Zhao, **Tianqi Liu**, Huiqiang Sun, Baopu Li, Zhiguo Cao  
*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024

## COMPETITIONS

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- NTIRE 2024 Challenge on HR Depth from Images of Specular and Transparent Surfaces  
Winner Award 2024

## AWARDS & HONORS

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- National Scholarship (Top 2%) 2024
- First-Class Scholarship for Postgraduates, HUST 2023
- Honours Degrees, HUST (Top 2%) 2023
- National Scholarship (Top 2%) 2022

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| • Merit Student, HUST (Top 2%)   | 2022 |
| • Meritorious Winner, American College Students Mathematical Contest in Modeling | 2022 |
| • Outstanding Undergraduate Student, HUST (Top 2%)                               | 2021 |
| • First prize in the National Mathematics Competition for college students       | 2021 |

## SKILLS

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PROGRAMMING LANGUAGES: Python, Matlab, C/C++

LANGUAGES: English (CET6:587), Chinese (Native)

## TEACHING

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Pattern Recognition, Teaching Assistant

Fall, 2023

Pattern Recognition, Teaching Assistant

Spring, 2024