

TIANQI LIU

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SHORT BIO

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](#). Before that, I received my bachelor's degree from HUST in 2023. My current research interests is 3D vision, working on fast and high-quality 3D reconstructions.

EDUCATION

Huazhong University of Science and Technology

2023 – Present

Master student in Artificial Intelligence

GPA: 95.22/100, Rank: 1st/90

Advisor: Prof. [Zhiguo Cao](#)

Huazhong University of Science and Technology

2019 – 2023

B.S. in Artificial Intelligence and Automation

GPA: 93.40/100, Rank: 1st/79

Advisor: Prof. [Zhiguo Cao](#)

PUBLICATIONS

- 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

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

AWARDS & HONORS

- Honours Degrees, Top 3% 2023
- National Scholarship, Top 2% 2022
- Merit Student, Top 2% 2022

- Meritorious Winner, American College Students Mathematical Contest in Modeling 2022
- Outstanding Undergraduate Student, Top 2% 2021
- First prize in the National Mathematics Competition for college students 2021

SKILLS

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

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

TEACHING

Pattern Recognition, Teaching Assistant

Fall, 2023

Pattern Recognition, Teaching Assistant

Spring, 2024