

# TIANQI LIU

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## EDUCATION

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### Huazhong University of Science and Technology

2023 – Present

*M.Eng. in Artificial Intelligence*

GPA: 95.22/100 Rank: 1/90

Advisor: Prof. Zhiguo Cao

### Huazhong University of Science and Technology

2019 – 2023

*B.Eng. in Artificial Intelligence and Automation*

GPA: 93.40/100 Rank: 1/79

## EXPERIENCE

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### MMLab, Nanyang Technological University (NTU)

Dec. 2024 – Jul. 2025

Research Assistant, advised by Prof. Ziwei Liu

### Beijing Academy of Artificial Intelligence (BAAI)

Jan. 2025 – Present

Remote Research Intern, advised by Prof. Hao Zhao

## PUBLICATIONS

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(\* denotes equal contribution.)

1. **Tianqi Liu\***, Zihao Huang\*, Zhaoxi Chen, Guangcong Wang, Shoukang Hu, Liao Shen, Huiqiang Sun, Zhiguo Cao, Wei Li, Ziwei Liu. *Free4D: Tuning-free 4D Scene Generation with Spatial-Temporal Consistency*. **ICCV 2025**.
2. **Tianqi Liu**, Guangcong Wang, Shoukang Hu, Liao Shen, Xinyi Ye, Yuhang Zang, Zhiguo Cao, Wei Li, Ziwei Liu. *MVSGaussian: Fast Generalizable Gaussian Splatting Reconstruction from Multi-View Stereo*. **ECCV 2024**.
3. **Tianqi Liu**, Xinyi Ye, Min Shi, Zihao Huang, Zhiyu Pan, Zhan Peng, Zhiguo Cao. *Geometry-aware Reconstruction and Fusion-refined Rendering for Generalizable Neural Radiance Fields*. **CVPR 2024**.
4. **Tianqi Liu**, Xinyi Ye, Weiyue Zhao, Zhiyu Pan, Min Shi, Zhiguo Cao. *When Epipolar Constraint Meets Non-local Operators in Multi-View Stereo*. **ICCV 2023**.
5. Liao Shen, **Tianqi Liu**, Huiqiang Sun, Jiaqi Li, Zhiguo Cao, Wei Li, Chen Change Loy. *DoF-Gaussian: Controllable Depth-of-Field for 3D Gaussian Splatting*. **CVPR 2025**.
6. Liao Shen, **Tianqi Liu**, Huiqiang Sun, Xinyi Ye, Baopu Li, Jianming Zhang, Zhiguo Cao. *DreamMover: Leveraging the Prior of Diffusion Models for Image Interpolation with Large Motion*. **ECCV 2024**.
7. Yaopeng Lou, Liao Shen, **Tianqi Liu**, Jiaqi Li, Zihao Huang, Huiqiang Sun, Zhiguo Cao. *MuGS: Multi-Baseline Generalizable Gaussian Splatting Reconstruction*. **ICCV 2025**.
8. Xinyi Ye, Weiyue Zhao, **Tianqi Liu**, Zihao Huang, Zhiguo Cao, Xin Li. *Constraining Depth Map Geometry for Multi-View Stereo: A Dual-Depth Approach with Saddle-shaped Depth Cells*. **ICCV 2023**.
9. Zihao Huang, Shoukang Hu, Guangcong Wang, **Tianqi Liu**, Yuhang Zang, Zhiguo Cao, Wei Li, Ziwei Liu. *WildAvatar: Learning In-the-wild 3D Avatars from the Web*. **CVPR 2025**.
10. Zhan Peng, Xinyi Ye, Weiyue Zhao, **Tianqi Liu**, Huiqiang Sun, Baopu Li, Zhiguo Cao. *3D Multi-frame Fusion for Video Stabilization*. **CVPR 2024**.
11. Jiaqi Li, Yiran Wang, Jinghong Zheng, Junrui Zhang, Liao Shen, **Tianqi Liu**, Zhiguo Cao. *CH<sub>3</sub>Depth: Efficient and Flexible Depth Foundation Model with Flow Matching*. **CVPR 2025**.

## Preprints

12. **Tianqi Liu**, Zhaoxi Chen, Zihao Huang, Shaocong Xu, Saining Zhang, Chongjie Ye, Bohan Li, Zhiguo Cao, Wei Li, Hao Zhao, Ziwei Liu. *Light-X: Generative 4D Video Rendering with Camera and Illumination Control*. **arXiv preprint**, 2025.
13. Zhaoxi Chen\*, **Tianqi Liu\***, Long Zhuo\*, Jiawei Ren, Zeng Tao, He Zhu, Fangzhou Hong, Liang Pan, Ziwei Liu. *4DNeX: Feed-Forward 4D Generative Modeling Made Easy*. **arXiv preprint**, 2025.
14. Huiqiang Sun, Liao Shen, Zhan Peng, Kun Wang, Size Wu, Yuhang Zang, **Tianqi Liu**, Zihao Huang, Xingyu Zeng, Zhiguo Cao, Wei Li, Chen Change Loy. *Generative Photographic Control for Scene-Consistent Video Cinematic Editing*. **arXiv preprint**, 2025.

## COMPETITIONS

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- **NTIRE 2024 Challenge on HR Depth from Images of Specular and Transparent Surfaces**  
Winner Award 2024
- **American College Students Mathematical Contest in Modeling**  
Meritorious Winner 2022
- **National Mathematics Competition for College Students**  
First Prize 2021

## AWARDS & HONORS

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- National Scholarship (Top 0.2% Nationwide) 2025
- National Scholarship (Top 0.2% Nationwide) 2024
- Honors Degree, HUST (Top 2%) 2023
- National Scholarship (Top 0.2% Nationwide) 2022
- Merit Student, HUST (Top 2%) 2022
- Outstanding Undergraduate Student, HUST (Top 2%) 2021

## SKILLS

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**Programming Languages:** Python, Matlab, C/C++

**Languages:** Mandarin - Native speaker, English - Fluent

## SERVICES

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- **Conference Reviewer**  
CVPR 2025, ICLR 2026
- **Journal Reviewer**  
IJCV
- **Teaching Assistant**
  - HUST, Pattern Recognition, Fall, 2023
  - HUST, Pattern Recognition, Spring, 2024

## LINKS

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- **Personal Pages:** <https://tqtqliu.github.io/>
- **Google Scholar:** <https://scholar.google.com/citations?user=mY2Qc7YAAAAJ>
- **Github:** <https://github.com/tqtqliu>
- **DBLP:** <https://dblp.org/pid/134/5653-3.html>
- **ORCID:** <https://orcid.org/0009-0003-0718-0614>
- **Twitter:** <https://x.com/tianqiliu664>