

FENGRUI TIAN

Ph.D. Student, Department of Computer and Information Science, University of Pennsylvania

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EDUCATION

Department of Computer and Information Science, University of Pennsylvania 2024 - now

Ph.D., Computer and Information Science

Advisor: Prof. [René Vidal](#)

GPA: 4.0/4.0

School of Artificial Intelligence, Xi'an Jiaotong University 2021 - 2024

M.Eng., Control Science and Engineering

Supervisor: Prof. [Shaoyi Du](#), Prof. [Yueqi Duan](#)

GPA: 3.73/4.0 (90.85/100) **General ranking: 1/107+**

School of Software Engineering, Xi'an Jiaotong University 2017 - 2021

B.Eng., Software Engineering

Supervisor: Prof. [Zhiqiang Tian](#)

GPA: 3.56/4.3 (85.96/100)

PUBLICATIONS

Equal contribution, (✉) Corresponding author

- [1] [Fengrui Tian](#), Tianjiao Ding, Jinqi Luo, Hancheng Min, René Vidal, [Voyaging into Perpetual Dynamic Scenes from a Single View](#), *International Conference on Computer Vision (ICCV)*, 2025.
- [2] [Fengrui Tian](#), Yaoyao Liu, Alan Yuille, Adam Kortylewski, Yueqi Duan, Shaoyi Du, Angtian Wang(✉), [Learning a Category-level Object Pose Estimator without Pose Annotations](#), *Arxiv preprint*, 2024.
- [3] [Fengrui Tian](#), Yueqi Duan, Angtian Wang, Jianfei Guo, Shaoyi Du(✉), [Semantic Flow: Learning Semantic Fields of Dynamic Scenes from Monocular Videos](#), *International Conference on Learning Representations (ICLR)*, 2024.
- [4] [Fengrui Tian](#), Shaoyi Du, Yueqi Duan(✉), [MonoNeRF: Learning a Generalizable Dynamic Radiance Field from Monocular Videos](#), *International Conference on Computer Vision (ICCV)*, 2023.
- [5] [Fengrui Tian](#)[#], Jiawei Fan[#], Xie Yu, Shaoyi Du(✉), Meina Song, and Yu Zhao, [TCVM: Temporal Contrasting Video Montage Framework for Self-supervised Video Representation Learning](#), *Asian Conference on Computer Vision (ACCV)*, pp. 1539-1555. 2022. (**Oral**, **Best Paper Award Honorable Mention**)
- [6] [Fengrui Tian](#), Zhiqiang Tian(✉), Zhang Chen, Dong Zhang, Shaoyi Du(✉), [Surface-GCN: Learning Interaction Experience for Organ Segmentation in 3D Medical Images](#), *Medical Physics*, 2023.

EXPERIENCES

Tsinghua University Mar. 2022 - Jun. 2024

Research Intern, Advisor: Prof. [Yueqi Duan](#) *Beijing, China*

- Proposed a generalizable dynamic radiance field from monocular videos termed **MonoNeRF** [4], and a semantic field of dynamic scenes dubbed **Semantic Flow** [3].

Johns Hopkins University Jun. 2023 - Jan. 2024

Research Intern, Advisor: [Angtian Wang](#), Prof. [Alan L. Yuille](#) *Baltimore, USA*

- Propose to learn a category-level object pose estimator without any pose annotations [2].

Megvii Research Apr. 2021 - Jan. 2022

Research Intern *Beijing, China*

- Proposed a video representation learning network called **TCVM** [5] based on frame feature differences.

Xi'an Jiaotong University

Apr. 2020 - Oct. 2021

Research Assistant, Supervisor: Prof. [Zhiqiang Tian](#)

Xi'an, China

- Proposed an interactive medical segmentation method named **Surface-GCN** [6].

AWARDS

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| • ACCV Best Paper Award Honorable Mention (2/278) | 2022 |
| • Best Master's Thesis (ranking 1/107+) , Xi'an Jiaotong University | 2024 |
| • Top 15 Postgraduate Students Honorable Mention (Top 0.1%) , Xi'an Jiaotong University | 2023 |
| • National Scholarship (Highest scholarship awarded by the Chinese government, Top 0.1%) | 2023 |
| • Xiaomi Special Scholarship (Highest scholarship sponsored by Xiaomi Corp., Top 0.1%) | 2023 |
| • Special Scholarship (Top 10%) , Xi'an Jiaotong University | 2022 |
| • Best Bachelor's Thesis (ranking 1/110+) , Xi'an Jiaotong University | 2021 |

INVITED TALKS

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| • MonoNeRF: Learning a Generalizable Dynamic Radiance Field from Monocular Videos
<i>Talk at CCVL group, Johns Hopkins University</i> | Sep. 2023 |
| • MonoNeRF and Semantic Flow
<i>Talk at Image Registration and Machine Learning (IRML) group, Xi'an Jiaotong University</i> | Apr. 2023 |
| • MonoNeRF and Beyond
<i>Talk at the Department of Electronic Engineering, Tsinghua University</i> | Dec. 2022 |

ACADEMIC SERVICES

Conference Reviewer

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| • IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) | 2023, 2024, 2025 |
| • IEEE / CVF International Conference on Computer Vision (ICCV) | 2025 |
| • Neural Information Processing Systems (NIPS) | 2024, 2025 |
| • The IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) | 2026 |
| • Chinese Conference on Pattern Recognition and Computer Vision (PRCV) | 2024, 2025 |
| • ACM Multimedia (ACM MM) | 2024, 2025 |

Journal Reviewer

- International Journal of Computer Vision (IJCV)
- ACM Transactions on Graphics (ToG)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Transactions on Multimedia (TMM)