

# TIANYUAN ZHANG

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## EDUCATION

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**Carnegie Mellon University, U.S.**

*2021.9 - present*

Master

Advisor: Prof. Srinivasa Narasimhan

M.S. in Robotics. Robotics Institute, School of Computer Science

**Peking University, China**

*2016.9 - 2020.6*

Undergraduate

B.S., Department of Computer Science, School of Electronics Engineering and Computer Science

## RESEARCH INTEREST

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Physics-based vision, Computational Imaging, Inverse Graphics, Representation Learning.

## PUBLICATIONS

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(\*: equal contribution)

***RIFE: Real-Time Intermediate Flow Estimation for Video Frame Interpolation***

Zhewei Huang, **Tianyuan Zhang**, Wen Heng, Boxin Shi, Shuchang Zhou.

ECCV 2022.

***MUTR3D: A Multi-camera Tracking Framework via 3D-to-2D Queries***

**Tianyuan Zhang**, Xuanyao Chen, Yue Wang, Yilun Wang, Hang Zhao.

CVPR 2022. Workshop on autonomous driving

***Embracing Single Stride 3D Object Detector with Sparse Transformer***

Lue Fan, Ziqi Pang, **Tianyuan Zhang**, Yu-Xiong Wang, Hang Zhao,

Feng Wang, Naiyan Wang, Zhaoxiang Zhang.

CVPR 2022.

***DETR3D: 3D Object Detection from Multi-view Images via 3D-to-2D Queries***

Yue Wang, Vitor Guizilini\*, **Tianyuan Zhang\***, Yilun Wang, Hang Zhao, Justin Solomon.

CoRL 2021.

***Objects365: A Large-scale, High-quality Dataset for Object Detection***

Shuai Shao\*, Zeming Li\*, **Tianyuan Zhang\***, Chao Peng\*, Gang Yu,

Xiangyu Zhang, Jing Li, Jian Sun.

ICCV 2019.

***You Only Propagate Once: Accelerating Adversarial Training via Maximal Principle***

Dinghuai Zhang\*, **Tianyuan Zhang\***, Yiping Lu\*, Zhanxing Zhu, Bin Dong.

NeurIPS 2019.

*Interpreting Adversarially Trained Convolutional Neural Networks*

Tianyuan Zhang, Zhanxing Zhu

ICML 2019.

**EXPERIENCE**

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**Robotics Institute, CMU**

Research Assistant

*2021.10 - present*

Mentor: Prof. Srinivasa Narasimhan

**Shanghai Qizhi Research Institute**

Research Assistant on Autonomous Driving

*2021.4 - 2021.9*

Mentor: Prof. Hang Zhao

**Bytedance AI Lab**

Research Engineer

*2020.6 - 2021.3*

**Microsoft Research Asia**

Research Intern

*2020.1 - 2020.6*

Mentor: Prof. Dihe & Dr. Guolin Ke

**Megvii(Face++) Research**

Research Intern

*2018.3 - 2020.1*

Mentor: Dr. Xiangyu Zhang

**Center for Big Data, Peking University**

Research Assistant

*2018.2 - 2020.6*

Mentor: Prof. Zhanxing Zhu

**HONORS AND AWARDS**

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Bronze Medal, Chinese Mathematical Olympiad (CMO), December 2015

Merit Student, Peking University 2016-2017

Leo Koguan Scholarship 2016-2017

WuSi Scholarship 2017-2018

Lihuirong Scholarship 2018-2019

Merit Student, Peking University, 2018-2019