

Yiming ZUO

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EDUCATION

Princeton University

Ph.D. Candidate in Computer Science

- Research Advisor: Prof. Jia Deng

Princeton, NJ, USA

08/2021 - 06/2026 (expected)

Carnegie Mellon University

M.S. in Robotics (MSR)

- Research Advisor: Prof. Katerina Fragkiadaki
- GPA: 4.19/4.33

Pittsburgh, PA, USA

08/2019 - 08/2021

Tsinghua University

B.Eng. in Electronic Engineering (with honors)

- GPA: 3.80/4.00, Ranking: 21/246 (top 10%)

Beijing, China

09/2015 - 07/2019

RESEARCH INTERESTS

My research focus is 3D computer vision and its application in autonomous driving, robotics, and XR. I'm especially interested in developing generalizable methods for 3D scene reconstruction, including monocular depth estimation, sensor fusion, and multi-view scene reconstruction and rendering. Since real-world data with high-quality 3D ground-truth is expensive and laborious to collect, I'm also interested in creating diverse and photo-realistic synthetic data using procedural generation.

PUBLICATIONS

- **Yiming Zuo***, Hongyu Wen*, Venkat Subramanian*, Patrick Chen, Karhan Kayan, Mario Bijelic, Felix Heide, Jia Deng. (*Equal Contribution) "Zero-Shot Depth from Defocus." *Arxiv: 2603.26658*.
- **Yiming Zuo**, Willow Yang, Zeyu Ma, Jia Deng. "OMNI-DC: Highly Robust Depth Completion with Multiresolution Depth Integration." *ICCV 2025*.
- Hongyu Wen, **Yiming Zuo**, Venkat Subramanian, Patrick Chen, Jia Deng. "Seeing and Seeing Through the Glass: Real and Synthetic Data for Multi-Layer Depth Estimation." *ICCV 2025*.
- Karhan Kayan*, Stamatis Alexandropoulos*, Rishabh Jain, **Yiming Zuo**, Erich Liang, Jia Deng. (*Equal Contribution) "Princeton365: A Diverse Dataset with Accurate Camera Pose." *ICCV 2025*.
- Abhishek Joshi, Beining Han, Jack Nugent, Max Gonzalez Saez-Diez, **Yiming Zuo**, Jonathan Liu, Hongyu Wen, Stamatis Alexandropoulos, Karhan Kayan, Anna Calveri, Tao Sun, Gaowen Liu, Yi Shao, Alexander Raistrick, Jia Deng. "Procedural Generation of Articulated Simulation-Ready Assets." *Arxiv: 2505.10755*.
- **Yiming Zuo***, Karhan Kayan*, Maggie Wang, Kevin Jeon, Jia Deng, Thomas L. Griffiths. (*Equal Contribution) "Towards Foundation Models for 3D Vision: How Close Are We?" *3DV 2025*.
- **Yiming Zuo**, Jia Deng. "OGNI-DC: Robust Depth Completion with Optimization-Guided Neural Iterations." *ECCV 2024*.
- Alexander Raistrick*, Lingjie Mei*, Karhan Kayan*, David Yan, **Yiming Zuo**, Beining Han, Hongyu Wen, Meenal Parakh, Stamatis Alexandropoulos, Lahav Lipson, Zeyu Ma, Jia Deng. (*Equal Contribution) "Infinigen Indoors: Photorealistic Indoor Scenes using Procedural Generation." *CVPR 2024*.
- Alexander Raistrick*, Lahav Lipson*, Zeyu Ma*, Lingjie Mei, Mingzhe Wang, **Yiming Zuo**, Karhan Kayan, Hongyu Wen, Beining Han, Yihan Wang, Alejandro Newell, Hei Law, Ankit Goyal, Kaiyu Yang, Jia Deng. (*Equal Contribution) "Infinite Photorealistic Worlds using Procedural Generation." *CVPR 2023*.
- (Notable top 5%, a.k.a. Oral) **Yiming Zuo**, Jia Deng. "View Synthesis with Sculpted Neural Points." *ICLR 2023*.
- Adam Harley, **Yiming Zuo**, Jing Wen, Ayush Mangal, Shubhankar Potdar, Ritwick Chaudhry, Katerina Fragkiadaki. "Track, Check, Repeat: An EM Approach to Unsupervised Tracking." *CVPR 2021*.

- **Yiming Zuo***, Weichao Qiu*, Lingxi Xie, Fangwei Zhong, Yizhou Wang, Alan Yuille. (*Equal Contribution) "CRAVES: Controlling Robotic Arm with a Vision-based Economic System." *CVPR 2019*.
- Xuecheng Nie, Jiashi Feng, **Yiming Zuo**, Shuicheng Yan. "Human Pose Estimation with Parsing Induced Learner." *CVPR 2018*.

VISITING POSITIONS

Apple Inc.

Research Intern

Santa Clara, CA, USA

04/2025 - 09/2025

- Supervisors: Dr. Vladlen Koltun and Dr. Stephan R. Richter

Johns Hopkins University

Visiting Researcher

Baltimore, MD, USA

06/2018 - 08/2018

- Research Advisor: Prof. Alan Yuille

National University of Singapore

Exchange Student

Singapore

08/2017 - 12/2017

- Research Advisor: Dr. Jiashi Feng.
- GPA: 5.0/5.0 (all five courses graded A+)

TEACHING EXPERIENCE

- COS 226 (Algorithms and Data Structures), Princeton University, Prof. Kevin Wayne and Prof. Dan Leyzberg, Spring 2023
- COS 451 (Computational Geometry), Princeton University, Prof. Bernard Chazelle, Fall 2022
- Media and Cognition, Tsinghua University, Prof. Shengjin Wang, Fall 2018

ACADEMIC SERVICES

- Reviewer for CVPR 23-25, ECCV 24/26, ICCV 23/25, NeurIPS 24-25, ICLR 25-26, ICML 22, 3DV 25, ICRA 21-22

ACADEMIC AWARDS

- Outstanding Undergraduate (Bachelor's Degree with Honors), top 10% students, Tsinghua University, 2019
- Tsinghua Research Excellence Award, top 5%, Tsinghua University, 2018
- Tsinghua Academic Excellence Award, top 5%, Tsinghua University, 2018
- Qualcomm Scholarship (60 among 3000, top 2%), Qualcomm, Inc & Tsinghua University, 2017
- Wong Lo-Kat Scholarship for Outstanding Academic Performance, Wong Lo-Kat, Inc & Tsinghua University, 2017
- First Prize, Chinese High School Biology Olympiad, Zoological and Botanical Society of China, 2014

SKILLS

- Professional experience with deep-learning frameworks (PyTorch).
- Professional skills in 3D engines (especially modeling with Blender using Geometry and Shader Nodes).
- Mathematics: Probability Theory, Stochastic Process, Calculus, Linear Algebra.
- Fluent speaker: English, Mandarin; beginner: Japanese (JLPT N3).
- Photography, especially wildlife.