ZIYI WU

Toronto, Ontario M5S 1A1 Canada

ziyiwu@cs.toronto.edu ⋄ https://wuziyi616.github.io/

EDUCATION

University of Toronto, Toronto, Canada   *Sept. 2021 – Present*
Ph.D. in Computer Science
Advisor: Prof. Animesh Garg & Prof. Andrea Tagliasacchi

Tsinghua University, Beijing, P.R.China   *Aug. 2017 – Jun. 2021*
B.Eng. in Automation
Advisor: Prof. Jiwen Lu

PUBLICATIONS & MANUSCRIPTS

1. **Ziyi Wu**, Nikita Dvornik, Klaus Greff, Jiaqi Xi, Thomas Kipf*, Animesh Garg*.
   SlotFormer: Long-Term Dynamic Modeling in Object-Centric Models
   Under review. (* equal contribution)

2. Silvia Selln*, Yun-Chun Chen*, **Ziyi Wu***, Animesh Garg, Alec Jacobson.
   Breaking Bad: A Dataset for Geometric Fracture and Reassembly
   Under review. (* equal contribution)

3. An Tao, Yueqi Duan, He Wang, **Ziyi Wu**, Pengliang Ji, Haowen Sun, Jie Zhou, Jiwen Lu.
   Dynamics-aware Adversarial Attack of 3D Sparse Convolution Network
   Under review.

4. **Ziyi Wu***, Yueqi Duan*, He Wang, Qingnan Fan, Leonidas J. Guibas.
   IF-Defense: 3D Adversarial Point Cloud Defense via Implicit Function based Restoration
   arXiv, 2020. (* equal contribution)

5. Ziwei Wang, Yunsong Wang, **Ziyi Wu**, Jiwen Lu, Jie Zhou.
   Instance Similarity Learning for Unsupervised Feature Representation
   ICCV, 2021.

6. Ziwei Wang, Jiwen Lu, **Ziyi Wu**, Jie Zhou.
   Learning Efficient Binarized Object Detectors with Information Compression
   T-PAMI, 2021.

7. Ziwei Wang, **Ziyi Wu**, Jiwen Lu, Jie Zhou.
   BiDet: An Efficient Binarized Object Detector
   CVPR, 2020.

8. Zimeng Tan, Yongjie Duan, **Ziyi Wu**, Jianjiang Feng, Jie Zhou.
   A Cascade Regression Model for Anatomical Landmark Detection
   MICCAI Workshop, 2019.

9. Zhanwei Xu, **Ziyi Wu**, Jianjiang Feng.
   CFUN: Combining Faster R-CNN and U-net Network for Efficient Whole Heart Segmentation
   arXiv, 2018

EXPERIENCE

University of Toronto   *Sept. 2021 – Present*
Research Intern   Supervisor: Prof. Animesh Garg & Prof. Andrea Tagliasacchi
3D vision, robotics

SenseTime Ltd.   *Mar. 2021 – Aug. 2021*
Research Intern   Mentor: Dr. Kai Chen & Wenwei Zhang
Open source codebase for 3D scene understanding ([MMDetection3D](#))

Stanford University   *Jun. 2020 – Dec. 2020*
Research Intern   Supervisor: Prof. Leonidas J. Guibas
3D adversarial attack and defense in point cloud

Tsinghua University   *Apr. 2019 – May. 2020*
Undergraduate Researcher   Supervisor: Prof. Jiwen Lu
Efficient design for 2D object detectors

SELECTED HONORS

- Outstanding Graduates (Beijing, Tsinghua University & Dept. of Automation), 2021

- SenseTime Undergraduate Scholarship for AI Research, 2020

- Xiaomi Scholarship, Tsinghua University, 2020

- Fang Chongzhi Scholarship, Tsinghua University, 2019

- National Scholarship, Tsinghua University, 2018

- Spark Program Membership, Tsinghua University

- Innovation Award of Science and Technology, Tsinghua University, 2018-2020

- Champion of the 20th Electronic Design Competition, Tsinghua University, 2018