Lihe Ding

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EXPERIENCE

• Research Intern in SenseTime, Metaverse Video R&D

Text-to-3D Generation using both 2D and 3D Foundation Models. (Supervised by Prof. Tianfan Xue & Dr. Zhanpeng Huang) *May 2023 to September 2023*

• Research Assistant in 3DVICI Lab at Tsinghua University

Unsupervised single view 3D reconstruction with NeRF, 3D Diffusion Model. (Supervised by Prof. Li Yi) *May* 2022 to April 2023

- Internship in Qcraft (self-driving startup) 3D detection on Point Clouds (RD Perception). *June 2021 to May 2022*
- Summer Exchange in MIT Complete the on-campus course of Machine Learning and Artificial Intelligence (MIT EECS). July 2019 to August 2019

EDUCATION

- **Ph.D. Multimedia Lab** The Chinese University of Hong Kong, supervised by Prof. Tianfan Xue *August 2023 to Now*
- M.S. Optical Imaging Detection and Recognition Laboratory

Beijing Institute of Technology September 2020 to July 2023

• B.S. Optoelectronic information science and Engineering, GPA: 90.2/100, Ranking: 8/161

Beijing Institute of Technology August 2016 to July 2020

Research Interests

3D Generation, Diffusion Models, NeRF, Point Clouds

PUBLICATIONS

- FH-Net: A Fast Hierarchical Network for Scene Flow Estimation on Real-world Point Clouds (ECCV22 Oral, 2.7%)
 Lihe Ding*, Shaocong Dong*, Tingfa Xu, Xinli Xu, Jie Wang, Jianan Li.
- CAGroup3D: Class-Aware Grouping for 3D Object Detection on Point Clouds (NeurIPS22) Haiyang Wang*, Lihe Ding*, Shaocong Dong, Shaoshuai Shi, Aoxue Li, Jianan Li, Zhenguo Li, Liwei Wang.
- MsSVT: Mixed-scale Sparse Voxel Transformer for 3D Object Detection on Point Clouds (NeurIPS22) Shaocong Dong*, Lihe Ding*, Haiyang Wang, Tingfa Xu, Xinli Xu, Jie Wang, Ziyang Bian, Ying Wang, Jianan Li.
- Sample-adaptive Augmentation for Point Cloud Recognition Against Real-world Corruptions (ICCV23)

Jie Wang, **Lihe Ding**, Tingfa Xu, Shaocong Dong, Xinli Xu, Peifu Liu, Jianan Li.

PROJECTS

Waymo (L1)

• **3D detection for autonomous vehicles** I establish the whole 3D object detection framework which has been running safely and efficiently on the autonomous bus of Qcraft *achieve 92.6 mAP on qcraft dataset and 78.5 mAP on*

AWARDS & RECOGNITION

- Xu Teli Scholarship The highest scholarship of BIT (President Scholarship). 2020
- First prize of National Undergraduate optoelectronic Design Competition 2018