

RESEARCH INTEREST

Language and Vision, 3D Understanding and Generation

EDUCATION

- **The Chinese University of Hong Kong** Hong Kong
PhD - Computer Science and Engineering
Advisor: Chi-Wing Fu
- **The Chinese University of Hong Kong** Hong Kong
MPhil - Computer Science and Engineering
- **Shanghai Jiao Tong University** China
Bachelor - Electrical Engineering

PUBLICATIONS

- **ISS: Image as Stepping Stone for Text-Guided 3D Shape Generation:**
Zhengzhe Liu, Peng Dai, Ruihui Li, Xiaojuan Qi, Chi-Wing Fu.
Submitted to International Conference on Learning Representations (**ICLR**), 2023. Review scores: 6,6,6,6
- **Towards Implicit Text-Guided 3D Shape Generation:**
Zhengzhe Liu, Yi Wang, Xiaojuan Qi, Chi-Wing Fu.
IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2022.
- **MEN: Mutual Enhancement Networks for Sign Language Recognition and Education:**
Zhengzhe Liu, Lei Pang, Xiaojuan Qi.
IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), 2022.
- **3D-to-2D Distillation for Indoor Scene Parsing:**
Zhengzhe Liu, Xiaojuan Qi, Chi-Wing Fu.
IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2021. **Oral Presentation**
- **One Thing One Click: A Self-Training Approach for Weakly Supervised 3D Semantic Segmentation:**
Zhengzhe Liu, Xiaojuan Qi, Chi-Wing Fu.
IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2021.
- **Global Texture Enhancement for Fake Face Detection in the Wild:**
Zhengzhe Liu, Xiaojuan Qi, Philip, H.S. Torr.
IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2020.
- **GeoNet++: Iterative Geometric Neural Network with Edge-Aware Refinement for Joint Depth and Surface Normal Estimation:**
Xiaojuan Qi*, **Zhengzhe Liu***, Renjie Liao, Philip H. S. Torr, Raquel Urtasun, Jiaya Jia. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2020
- **3D Motion Decomposition for RGBD Future Dynamic Scene Synthesis:**
Xiaojuan Qi*, **Zhengzhe Liu***, Qifeng Chen, Jiaya Jia.
IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2019.
- **Self-Boosted Gesture Interactive System with ST-Net:**
Zhengzhe Liu*, Xiaojuan Qi*, Lei Pang.
ACM Multimedia Conference (**ACM MM**), 2018.
- **Command-driven Articulated Object Understanding and Manipulation:**
Ruihang Chu, **Zhengzhe Liu**, Xiaoqing Ye, Xiao Tan, Xiaojuan Qi, Chi-Wing Fu, Jiaya Jia.
Submitted to IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2023.
- **VGFN : Video Glance and Focus Network for Anomaly Detection:**
Yingxian Chen, **Zhengzhe Liu**, Zhang Baoheng, Wilton Fok, Xiaojuan Qi, Yik-Chung Wu.
AAAI Conference on Artificial Intelligence (**AAAI**), 2023
- **Sparse2Dense: Learning to Densify 3D Features for 3D Object Detection:**
Tianyu Wang, Xiaowei Hu, **Zhengzhe Liu**, Chi-Wing Fu.
Neural Information Processing Systems (**NeurIPS**), 2022
- **TWIST: Two-Way Inter-label Self-Training for Semi-supervised 3D Instance Segmentation:**
Ruihang Chu, Xiaoqing Ye, **Zhengzhe Liu**, Xiao Tan, Xiaojuan Qi, Chi-Wing Fu, Jiaya Jia.
IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2022.

- **GeoNet: Geometric Neural Network for Joint Depth and Surface Normal Estimation:**
Xiaojuan Qi, Renjie Liao, **Zhengzhe Liu**, Raquel Urtasun, Jiaya Jia. IEEE Conference on Computer Vision and pattern Recognition (**CVPR**), 2018.
- **Augmented Feedback in Semantic Segmentation under Image Level Supervision:**
Xiaojuan Qi, **Zhengzhe Liu**, Jianping Shi, Jiaya Jia.
European Conference on Computer Vision (**ECCV**), 2016.

PROFESSIONAL ACTIVITIES

- **Conference Reviewer:** ICLR 2023, ECCV 2022, CVPR 2022, CVPR 2021, ICCV 2021, AAAI 2021
- **Journal Reviewer:** IJCV, TMM, TNNLS, TCSVT
- **Invited Talk:** CVPR 2022 Workshop on ScanNet Indoor Scene Understanding Challenge

HONORS AND AWARDS

- MSRA Fellowship Nomination Award 2022 (33 in Asia)
- Shanghai Outstanding Graduate Award
- Meritorious Winner of MCM (Mathematical Contest in Modeling)
- Outstanding League Member Award
- Litian Tangren Scholarship (RMB 10,000)
- Excellent Student Scholarship, Shanghai Jiao Tong University (3 times)

TEACHING

- ENGG 2020. Digital Logic and Systems
- CSCI 3180. Principles of Programming Languages
- CSCI 1580. Visual Programming
- ENGG 1100. Engineering and Design