Xuyang BAI

Education

Hong Kong University of Science and Technology

Hong Kong, China

Ph.D. candidate in Computer Science and Engineering

Sept.2018-Present

• Advisor: Prof. Chiew-Lan Tai

Research Area: Point Cloud Registration; LiDAR Perception;

Beijing Normal University

Beijing, China

B.S. in Electronic Information Science and Technology

Sept.2014-Jul.2018

• Cumulative GPA: 3.66/4, Major GPA: 3.82/4; Language: TOEFL 103

Publications

- VMNet: Voxel-Mesh Network for Geodesic-Aware 3D Semantic Segmentation, ICCV2021 Oral
 Zeyu Hu, Xuyang Bai, Jiaxiang Shang, Runze Zhang, Jiayu Dong, Xin Wang, Guangyuan Sun, Hongbo Fu, Chiew-Lan Tai.
- SGMNet: Learning to Matching Features with Seeded Graph Matching Network, ICCV2021.

 Hongkai Chen, Zixin Luo, Jiahui Zhang, Lei Zhou, Xuyang Bai, Zeyu Hu, Chiew-Lan Tai, Long Quan.
- PointDSC: Robust Point Cloud Registration using Deep Spatial Consistency, CVPR2021. Xuyang Bai, Zixin Luo, Lei Zhou, Hongkai Chen, Lei Li, Zeyu Hu, Hongbo Fu, Chiew-Lan Tai.
- JSENet: Joint Semantic Segmentation and Edge Detection Network for 3D Point Clouds, ECCV2020 Zeyu Hu, Mingmin Zhen, Xuyang Bai, Hongbo Fu, Chiew-Lan Tai.
- D3Feat: Joint Learning of Dense Detection and Description of 3D Local Features, CVPR2020 Oral. Xuyang Bai, Zixin Luo, Lei Zhou, Hongbo Fu, Long Quan, Chiew-Lan Tai.
- ASLFeat: Learning Local Features of Accurate Shape and Localization, CVPR2020.
 Zixin Luo, Lei Zhou, Xuyang Bai, Hongkai Chen, Jiahui Zhang, Yao yao, Shiwei Li, Tian Fang, Long Quan.

Experience

Research Intern, Huawei Intelligent Automotive Solution BU

Mar.2021-Present

- Develop and maintain the PyTorch codebase for 3D LiDAR and Radar perception.
- Research on multi-modality object detection.

Research Intern, Megvii (Face++) Research Shanghai

Sept.2020-Feb.2021

Research on 3D feature matching and point cloud registration with low overlap.

Teaching Assistant, HKUST

Feb.2019-Feb.2020

- COMP4411: Computer Graphics, Spring 2019
- COMP5411: Advanced Computer Graphics, Fall 2019

Skills

Programming

Python, C/C++

Libraries

PyTorch, TensorFlow, Open3D, OpenCV