Xiangyue Liu

○Web: xiangyueliu.github.io ○ Email: liuxiangyue@buaa.edu.cn ○ Birth:1996/10/1

EDUCATION

Beihang University (University of 985 Project)　　　　　　　　　　　　　**Beijing, China**
Master of Software Engineering　　　　　　　　　　　　　　　　　　*Score: 84.94/100, Jun 2021*
Northeast Normal University (University of 211 Project)　　　　　**Changchun, China**
Bachelor of Software Engineering　　　　　　　　　　　　　　　　*Score: 82.57/100, Jun 2018*

KEY SKILLS

○ Research Interest: Neural Implicit Surface Reconstruction, 3D Reconstruction, SLAM
○ Programming: Python, C++, Matlab
○ Deep Learning: PyTorch, TensorFlow
○ Tools: OpenCV, g2o, Ceres, Eigen, Latex

PUBLICATIONS

Building Animatable Neural Articulated 3D Models from Casual Videos　　*On going*
Xiangyue Liu, Li Yi, Weixin Xu, Shuchang Zhou, Yang Gao

Sobolev Training for Implicit Neural Representations with Approximated Image Derivatives　　*ECCV 2022*
Wentao Yuan, Qingtian Zhu, **Xiangyue Liu**, Yikang Ding, Haotian Zhang, Chi Zhang

KD-MVS: Knowledge Distillation Based Self-supervised Learning for Multi-view Stereo　　*ECCV 2022*
Yikang Ding, Qingtian Zhu, **Xiangyue Liu**, Wentao Yuan, Haotian Zhang, Chi Zhang

TransMVSNet: Global Context-aware Multi-view Stereo Network with Transformers　　*CVPR 2022*
Yikang Ding*, Wentao Yuan*, Qingtian Zhu, Haotian Zhang, **Xiangyue Liu**,
Yuanjiang Wang, Xiao Liu

Structure Reconstruction Using Ray-Point-Ray Features: Representation and Camera Pose Estimation　　*ICRA 2021*
Yijia He*, **Xiangyue Liu***, Xiao Liu, Ji Zhao (* Equal Contribution)

2nd Place Solution to Instance Segmentation of IJCAI 3D AI Challenge 2020　　*IJCAI 2020 Workshop*
Kai Jiang*, **Xiangyue Liu***, Zheng Ju*, Xiang Luo (* Equal Contribution)

An Optimization Algorithm of Baseline Density Distribution for An Ultra-long Wave Astronomical Observation Array　　*IAC 2020*
Jingwei Yang, Juntao Pu, Xinyi Fei, **Xiangyue Liu**, You Song, Li Deng

EXPERIENCE

Tsinghua University   **Beijing, China**
- ○ *Visiting Student at IIIS*   *Aug 2021 - Present*
  - Do the research about neural implicit surface reconstruction.

MEGVII Research   **Beijing, China**
- ○ *3D Vision Intern*   *Jun 2021 - Aug 2021*
  - Do the research on Multi-view Stereo (MVS) with deep learning.
- ○ *SLAM Intern*   *Aug 2019 - Apr 2020*
  - Research on visual Simultaneous Localization and Mapping (SLAM) algorithms.
  - Build a ray-point-ray feature-based stereo visual odometry (VO) by C++.

National Space Science Center   **Beijing, China**
- ○ *Research Group Member*   *Sept 2018 - Sept 2019*
  - Reconstruct the sky map from under sampled inversion astronomical matrix by using deep learning methods (conditional GANs).

AWARDS

- ○ Excellent graduate in Beijing, Jun 2021
- ○ 2nd Place in IJCAI-PRICAI 2020 3D AI Challenge: Instance Segmentation, Oct 2020
- ○ First class scholarship of Beihang University, Jun 2020
- ○ First class scholarship of Beihang University, Oct 2019
- ○ Second class scholarship of Beihang University, Oct 2018
- ○ Third class scholarship of Northeast Normal University, Jun 2018
- ○ Third class scholarship of Northeast Normal University, Nov 2017
- ○ National College Students Innovation and Entrepreneurship Training Program, Dec 2016
- ○ Second class scholarship of Northeast Normal University, Oct 2015

ACTIVITES

- ○ Oral presentation for the IJCAI-PRICAI 2020 3D AI workshop   *Jan 2021*
- ○ Outstanding student of visual SLAM class at Shenlan School   *Aug 2019*
- ○ Volunteer of the 2nd National SLAM Technology Forum   *Jul 2019*
- ○ League secretary in Software College at Beihang University   *Sep 2018 - Jun 2021*
- ○ Recreation and sports secretary in Software College at NENU   *Sep 2015 - Jun 2018*