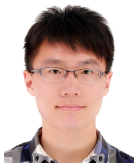

# Shunkai Li

*Peking University, Beijing, China*

lishunkaipku@gmail.com Github: https://github.com/lishunkai

## Skills

- Two years of SLAM/VO experience
- Familiar with commonly used datasets for SLAM
- Familiar with representative SLAM/VO frameworks
- Familiar with C++, Python
- Experienced in coding under Linux
- Good at English and fluency in speaking

## Education

**Peking University** **2018-2021**
- Master of Computer Science Beijing, China
- Research interests: visual SLAM/VO/VIO, self-supervised learning
- Advisor: Professor Hongbin Zha

**University of Oxford (as an Exchange Student)** **2016**
- Won the scholarship for overseas study in Nankai University. Oxford, UK
- Got Top. 1 in Image Processing and Closest Point Method and Symmetries in Physics courses.
- Was awarded as the Excellent Student of Oxford Summer Institute (Top 5%).

**Nankai University** **2014-2018**
Major: Opto-electronic Information Science and Engineering (Bachelor) Tianjin, China
Cumulated Grade Point Average: 90.94/100 Ranking: 1/33

## Related Experience

**Self-supervised online learning for end-to-end VO/SLAM** **2019**
*Current research*

**Self-supervised VO with GAN** **2018-2019**
*ICCV 2019 submission*

**Stereo SLAM for online 3D reconstruction** **2019**
*Cooperation project with SenseTime, China*

**Stereo SLAM for indoor robotics** **2018-2019**
*Cooperation project with BOE, China*

**Supervised learning-based VO with LSTM** **2018**
- Features: an RNN-based deep VO with tracking, attention-based memory aggregation, and pose refinement
- *Beyond Tracking: Selecting Memory and Refining Poses for Deep Visual Odometry* (*2nd author*) CVPR 2019 Oral

**Research on visual SLAM based on deep learning** **2017-2018**
*Dissertation of bachelor degree*
- Features: feature-based SLAM, dense depth creation from sparse points, 3D reconstruction
- Excellent paper award of Nankai University (Top 5%).

**Application of monocular SLAM in mobile devices for augmented reality** **2017-2018**
*Internship at Samsung Research China*
- Features: plane detection, semantic segmentation, dense depth creation from sparse points, visual inertial SLAM

**Application of monocular SLAM in autonomous driving** **2017**
*CalmCar Electronic Technology Co., Ltd, China*
- Features: feature-based SLAM, ego-motion, foreground object motion prediction

## Papers

- Fei Xue, Shunkai Li, Xin Wang, Qiuyuan Wang, Junqiu Wang, and Hongbin Zha. *Beyond Tracking: Selecting Memory and Refining Poses for Deep Visual Odometry*. CVPR 2019 oral presentation
- Shunkai Li, Yifan Wang, Weichen Wu, and Yanmei Liang. *Predictive searching algorithm for Fourier ptychography.* Journal of Optics (SCI) Impact factor: 2.33