LEI ZHOU

⋄ Tel: (+852) 52267098; ⋄ Email: zlthinker93@gmail.com
⋄ Website: `https://zlthinker.github.io/`; ⋄ Google scholar: link

EDUCATION

Hong Kong University of Science and Technology   *Sep. 2015 - Winter 2019 (expected)*
Ph.D. candidate - The Department of Computer Science & Engineering
Advisor: Prof. Long Quan

Zhejiang University, Mainland China   *Sep. 2011 - Jul. 2015*
B.S. - College of Information Science & Electronic Engineering
GPA: 3.88 / 4.0

EXPERIENCE

Computer Vision & Graphics Lab, HKUST   *Sep. 2015 - present*
PhD Candidate   *Hong Kong*

· Advised by Prof. Long Quan
· Area: Large-Scale 3D reconstruction; Feature matching; Structure from Motion; Image Localization; Point cloud registration

– Participating in building the online 3D reconstruction system: `https://www.altizure.com/`

Mobile Computing Group,
Intel Asia-Pacific Research & Development Ltd.   *Jul. 2014 - May 2015*
Research Intern   *Shanghai*

· Advised by Manager Haicheng Li
· Area: Android System Development

– Designed a profiling tool monitoring mobile devices' power consumption based on process scheduling.

PUBLICATIONS

-Visual Matching

· "Learning Two-View Correspondences and Geometry Using Order-Aware Network", ICCV 2019
Jiahui Zhang, Dawei Sun, Zixin Luo, Anbang Yao, **Lei Zhou**, Tianwei Shen, Yurong Chen, Long Quan, Hongen Liao

· "Learning and Matching Multi-View Descriptors for Registration of Point Clouds", ECCV 2018
Lei Zhou, Siyu Zhu, Zixin Luo, Tianwei Shen, Runze Zhang, Mingmin Zhen, Tian Fang, Long Quan

· "Matchable Image Retrieval by Learning from Surface Reconstruction", ACCV 2018
Tianwei Shen, Zixin Luo, **Lei Zhou**, Runze Zhang, Siyu Zhu, Tian Fang, Long Quan

· "Progressive Large Scale-Invariant Image Matching in Scale Space", ICCV 2017
Lei Zhou, Siyu Zhu, Tianwei Shen, Jinglu Wang, Tian Fang, Long Quan

-SfM & SLAM

· "Self-Supervised Learning of Depth and Motion Under Photometric Inconsistency", ICCV 2019 GMDL Workshop
Tianwei Shen, Zixin Luo, **Lei Zhou**, Yao Yao, Shiwei Li, Jiahui Zhang, Tian Fang, Long Quan

- "Beyond Photometric Loss for Self-Supervised Ego-Motion Estimation", ICRA 2019
  Tianwei Shen, Zixin Luo, **Lei Zhou**, Hanyu Deng, Runze Zhang, Tian Fang, Long Quan

- "Very Large-Scale Global SfM by Distributed Motion Averaging", CVPR 2018
  Siyu Zhu, Runze Zhang, **Lei Zhou**, Tianwei Shen, Tian Fang, Ping Tan, Long Quan

- "Parallel Structure from Motion from Local Increment to Global Averaging", arXiv:1702.08601
  Siyu Zhu, Tianwei Shen, **Lei Zhou**, Runze Zhang, Jinglu Wang, Tian Fang, Long Quan

-Bundle Adjustment

- "Distributed Very Large Scale Bundle Adjustment by Global Camera Consensus", TPAMI 2018
  Runze Zhang, Siyu Zhu, Tianwei Shen, **Lei Zhou**, Zixin Luo, Tian Fang and Long Quan

-Local Descriptor

- "ContextDesc: Local Descriptor Augmentation with Cross-Modality Context", CVPR 2019
  Zixin Luo, Tianwei Shen, **Lei Zhou**, Jiahui Zhang, Yao Yao, Shiwei Li, Tian Fang, Long Quan

- "GeoDesc: Learning Local Descriptors by Integrating Geometry Constraints", ECCV 2018
  Zixin Luo, Tianwei Shen, **Lei Zhou**, Siyu Zhu, Runze Zhang, Yao Yao, Tian Fang, Long Quan

-Semantic Segmentation

- "Learning Fully Dense Neural Networks for Image Semantic Segmentation", AAAI 2019
  Mingmin Zhen, Jinglu Wang, **Lei Zhou**, Tian Fang, Long Quan

TECHNICAL PROFICIENCY

Programming	C/C++, Python
Libraries	OpenCV, Caffe, Tensorflow

OTHERS

I am honored to serve as a reviewer for CVPR2018, ECCV2018, CVPR2019, ICCV2019, AAAI2020.