Hui Qiao

Ph.D Candidate (Since 2013/09)

BBNC (Broadband Network & Digital Media Lab)

MMCP (Multi-dimension & Multi-scale Computational Photography Lab)

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EDUCATION

Sep. 2013 – Jul. 2018 (expected)   Tsinghua University, Beijing, China

Ph.D. in Department of Automation, Advisor: Professor Qionghai Dai

Sep. 2009 – Jul. 2013   Tsinghua University, Beijing, China

B.E. in Department of Automation (GPA 94, Rank 1/141)

CURRENT RESEARCH INTERESTS

- ☐ Computational Imaging
- ☐ Computer Vision
- ☐ ToF Imaging

PUBLICATIONS

- ☐ **Hui Qiao**, Jingyu Lin, Yebin Liu, Matthias B. Hullin, and Qionghai Dai, Resolving transient time profile in ToF imaging via log-sum sparse regularization, Optics Letters (OL), 2015, 40(6): 918-921.
- ☐ **Hui Qiao**, Jiamin Wu, Xiaoxu Li, Morteza H. Shoreh, Jingtao Fan, and Qionghai Dai, GPU-based deep convolutional neural network for tomographic phase microscopy with l1 fitting and regularization, J. Biomed. Opt. (JBO), 2018, 23(6): 066003.

HONORS AND AWARDS

- ☐ National Scholarship, 2016
- ☐ Freshman Scholarship for Doctoral candidate of Tsinghua University, 2013 (Rank 1 in Department of Automation, Tsinghua University)
- ☐ Outstanding Graduate Student of Beijing, China, 2013
- ☐ Outstanding Graduate Student of Tsinghua University, 2013
- ☐ Friend of Tsinghua-Chang Dong Scholarship (1/141), 2012
- ☐ Friend of Tsinghua-Fang Chongzhi Scholarship (1/141), 2011
- ☐ "12.9 Scholarship" of Tsinghua University (1/141), 2010

SOCIAL ACTIVITIES

- ☐ Chairman of Zijing Volunteer Organization, Youth League Committee of Tsinghua University (Sep. 2014 – Jul. 2015)
- ☐ President of Student Union, Department of Automation, Tsinghua University (Sep. 2012 – Jul. 2013)

SKILLS

- ☐ Programming: Proficient in C, C++, Matlab and R
- ☐ Academic: Strong Optimization Background, Signal Processing, Good at Original Thinking and System Building, etc

Research Projects

- ☐ Realizing the Depth of Field Control in Dynamic Scene. Based on Extracting Depth and Radiance from a Defocused Video Pair. 2013-2014
- ☐ Resolving Multipath Interference in Time-of-Flight Imaging. We Demonstrate a Method based on Log-sum Sparsity Regularization to Recover Transient Time Profiles of Specular Reflections from Multi-frequency and Multi-phase Measurements. 2014-2015
- ☐ Looking Around Corners and Looking Through the Scattering Media. Based on Recovering Transient Time Profiles in Time-of-Flight Imaging. 2014-2016
- ☐ Polarized 3D: High-Quality Depth Sensing with Polarization Cues. We Propose a Framework to Combine Surface Normals from Polarization with an Aligned Depth Map. 2015-2016

Research Experience

- ☐ Attend the **Photonics Asia** Sponsored by SPIE, the International Society for Optics and Photonics and the Chinese Optical Society (COS), October 9-11, 2014 at Beijing, China.

References

Prof. Qionghai Dai, Department of Automation, Tsinghua University   qhdai@tsinghua.edu.cn