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. OSA Optics Letters (OL), 2015.

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