Dr. Hao ZHOU

Current Status Applied Scientist, Amazon Web Service Rekognition.

Contact Information
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Education

The University of Maryland - College Park (UMD) **Sep. 2013 - Aug. 2019**
- PhD candidate Dept. of Computer Science
- Adviser: Prof. David W. Jacobs
- Area of Study: Computer Vision

The University of Hong Kong (HKU) **Sep. 2010 - Nov. 2012**
- M.Phil. Dept. of Computer Science
- Adviser: Dr. Kwan-Yee K. Wong
- Area of Study: Computer Vision

The University of Science and Technology of China (USTC) **Sep. 2006 - Jun. 2010**
- B.Eng Dept. of Electronic Engineering and Information Science

Research Interests Computer Vision: lighting estimation from faces and natural indoor scene; network compression.

Research Experience

Intern at Adobe Research **May - Aug. 2018**
- Mentor: Sunil Hadap
- Topic: Deep portrait relighting.

Intern at Media Analytics group NEC Labs America **May - Aug. 2017**
- Mentor: Quoc-Huy Tran and Manmohan Chandraker
- Topic: Learning affordance correspondence through human object interaction.

Intern at National ICT (NICTA) Australia **Jul. - Oct. 2015**
- Mentor: Jose M. Alvarez and Fatih Porikli
- Topic: Compressing deep neural networks.

Research Assistant at The University of Hong Kong **Nov. 2012 - Jul. 2013**
- Adviser: Dr. Kwan-Yee K. Wong
- Topic: Face sketch synthesis.

Referee **Journal:** IEEE Transactions on Signal Processing. IEEE Transactions on Image Processing.
conference: ICCV, CVPR, AAAI, WACV, ACCV

Selected Publications

1. **Hao Zhou**, Sunil Hadap, Kalyan Sunkavalli, David W Jacobs. Deep Single-Image Portrait Relighting. IEEE *International Conference on Computer Vision (ICCV)*, 2019.
2. **Hao Zhou**, Yu, Xiang, David W Jacobs. GLoSH: Global-Local Spherical Harmonics for Intrinsic Image Decomposition. IEEE *International Conference on Computer Vision (ICCV)*, 2019. (Oral)
3. **Hao Zhou***, Jin Sun*, Yaser Yacoob, David W Jacobs. Label Denoising Adversarial Network (LDAN) for Inverse Lighting of Face Images. IEEE *International Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018. (spotlight, * means equal contribution)
4. Hui Ding, **Hao Zhou**, Shaohua Kevin Zhou, Rama Chellappa. A Deep Cascade Network for Unaligned Face Attribute Classification. *Association for the Advancement of Artificial Intelligence (AAAI)*, 2018. (spotlight)
5. Soumyadip Sengupta, **Hao Zhou**, Walter Forkel, Ronen Basri, Tom Goldstein, David W Jacobs. Solving Uncalibrated Photometric Stereo Using Fewer Images by Jointly Optimizing Low-rank Matrix Completion and Integrability. *Journal of Mathematical Imaging and Vision (JMIV)*, 2018.

6. **Hao Zhou**, Jose M. Alvarez, Fatih Porikli. Less is More: Towards Compact CNNs. *European Conference on Computer Vision (ECCV)*, 2016. (Spotlight)

7. **Hao Zhou**, Torsten Sattle, David W. Jacobs. Evaluating Local Features for Day-Night Matching. *European Conference on Computer Vision workshop (ECCVW)* , 2016.

8. **Hao Zhou**, Zhanghui Kuang, Kwan-Yee K. Wong. Markov Weight Fields for Face Sketch Synthesis. IEEE *International Conference on Computer Vision and Pattern Recognition (CVPR)*, 2012.

9. Zhanghui Kuang, Dirk Schnieders, **Hao Zhou**, Kwan-Yee K. Wong, Yizhou Yu, Bo Peng. Learning Image-Specific Parameters for Interactive Segmentation. IEEE *International Conference on Computer Vision and Pattern Recognition (CVPR)*, 2012.

Teaching

Teaching Assistant, Dept. of Computer Science, UMD

- CMSC733 Computer Processing of Pictorial Information (Prof. David W. Jacobs) Fall 2014
- CMSC426 Image Processing (Prof. David W. Jacobs) Spring 2014
- CMSC131 Object-Oriented Programming I (Dr. Fawzi Emad and Dr. Evan Golub). Fall 2013

Teaching Assistant, Dept. of Computer Science, HKU

- CSIS0259 Principles of Programming Languages (Dr. C.F. Chong). Fall 2011
- CSIS0234A Computer and Communication Networks (Dr. T.C. Tam). Spring 2011

Honors & Awards

Dean's Fellowship, Dept. of CS, UMD **2013, 2014**
Guanghua Scholarship **2009**
Weining Gong Scholarship **2008**
Outstanding Student Scholarship of USTC, Grade 1 **2007**

Skills

Main Developing Language: `Python`.
Other Languages: `Matlab`, `C/C++`.
Tools: `OpenCV`, `Pytorch`.