

Xiang Wang

Tsinghua University

Education

2018-present Visiting Student, University of California, Merced, CA, U.S.

Supervised by Prof. Ming-Hsuan Yang

2014–present **Ph.D. Candidate**, *Tsinghua University*, Beijing, China.

Supervised by Prof. Huimin Ma

2010–2014 **B.Eng.**, *Tsinghua University*, Beijing, China.

GPA: 89.5/100

Outstanding Graduates, Tsinghua University, 2014 (Top 10%)

Research Interests

Computer Vision, Machine Learning.

Publications

- [1] Xiang Wang, Huimin Ma, Shaodi You, Deep Clustering for Weakly-Supervised Semantic Segmentation in Autonomous Driving Scenes, *submitted to ECCV 2018*.
- [2] Xiang Wang, Shaodi You, Xi Li, Huimin Ma, Weakly-Supervised Semantic Segmentation by Iteratively Mining Common Object Features, CVPR 2018.
- [3] Xiang Wang, Huimin Ma, Xiaozhi Chen, Shaodi You, Edge Preserving and Multi-Scale Contextual Neural Network for Salient Object Detection, *IEEE TIP 2018*.
- [4] Xi Li, Huimin Ma, **Xiang Wan**g, Kai Zhang. Saliency Detection via Alternative Optimization Adaptive Influence Matrix Model, Pattern Recognition Letters, 2018
- [5] Xi Li, Huimin Ma, **Xiang Wang**, Xiaoqin Zhang, Traffic Light Recognition for Complex Scene with Fusion Detections, *IEEE Transactions on Intelligent Transportation Systems*, (*IEEE T-ITS*) 2018.
- [6] Xiaozhi Chen, Huimin Ma, Chenzuo Zhu, **Xiang Wang**, Zhichen Zhao, Boundaryaware Box Refinement for Object Proposal Generation, *Neurocomputing*, 2017.
- [7] **Xiang Wang**, Huimin Ma, Xiaozhi Chen, Salient Object Detection via fast R-CNN and Low-level Cues, *ICIP 2016 (oral)*.
- [8] **Xiang Wang**, Huimin Ma, Xiaozhi Chen, Geodesic Weighted Bayesian Model for Saliency Optimization, *Pattern Recognition Letters* 75 (2016) 1–8.
- [9] **Xiang Wang**, Huimin Ma, Xiaozhi Chen, Geodesic Weighted Bayesian Model for Salient Object Detection, *ICIP 2015 (oral)*.
- [10] Xiaozhi Chen, Huimin Ma, **Xiang Wang**, Zhichen Zhao, Improving Object Proposals with Multi-Thresholding Straddling Expansion, *CVPR 2015*.

Research Projects

Weakly-Supervised Semantic Segmentation by Iteratively Mining Common Object Features.

- Mining common object features from coarse object seeds
- Iteratively mining features and training network to progressively improve performance
- Published on CVPR 2018.

Edge Preserving and Multi-Scale Contextual Neural Network for Salient Object Detection.

- Propose a novel edge preserving and multi-scale contextual network for saliency detection
- The proposed framework achieves both a clear boundary and multi-scale contextual robustness simultaneously for the first time
- Published on ICIP 2016 and IEEE TIP 2018.

Geodesic weighted Bayesian Model for Saliency Optimization.

- o Propose an unified geodesic weighted Bayesian framework for salient object detection
- Considering spatial relationship under Bayesian framework to better represent the compactness of objects
- Published on ICIP 2015 and Pattern Recognition Letters 2016.

Reviewer

IEEE TIP, Multimedia Tools and Applications

Awards and Grants

- Outstanding Graduates (Top 10%), Tsinghua University, 2014
- o National Encouragement Scholarship, Ministry of Education, China, 2012 & 2013
- o Scholarship for Overseas Graduate Studies, Tsinghua University, 2017
- Scholarship of Academic Excellence, 2011 & 2015 & 2016 & 2017
- o Excellent League Member, Tsinghua University, 2012
- Scholarship of Social Work, Tsinghua University, 2013
- o Excellent Student Cadre, Tsinghua University, 2013
- Outstanding Volunteer, Tsinghua University, 2013
- Dengfeng Travel Grant, Tsinghua University, 2015 & 2016
- o IEEE SPS Travel Grant, 2016

Professional Skills

C/C++, Java, Matlab, Python, Caffe, etc.

References

Ming-Hsuan Yang, Professor, University of California, Merced.

http://faculty.ucmerced.edu/mhyang/

Huimin Ma, Associate Professor, Tsinghua University.

http://3dimage.ee.tsinghua.edu.cn/mhm/