

# XIAOWEI HU

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## EDUCATION

**The Chinese University of Hong Kong (CUHK), Ph.D.** in Computer Science and Engineering. 08/2016 - Present  
Advisor: Prof. Pheng-Ann Heng & Prof. Chi-Wing Fu Expected graduation date: 07/2020  
Research interests: Computer Vision, Deep Learning.

**South China University of Technology (SCUT), B.Eng.** in Computer Science and Technology. 09/2012 - 07/2016  
**GPA: 3.95/4.0** (*Rank 1<sup>st</sup>* in All-English-Teaching Union Class)  
★ Selected by SCUT for a special class for the most promising students.

## PUBLICATIONS

- [1] *Direction-aware Spatial Context Features for Shadow Detection*  
**Xiaowei Hu**, Lei Zhu, Chi-Wing Fu, Jing Qin, and Pheng-Ann Heng  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2018 (**Oral**, acceptance rate: **2.06%**)
- [2] *Recurrently Aggregating Deep Features for Salient Object Detection*  
**Xiaowei Hu**, Lei Zhu, Jing Qin, Chi-Wing Fu, and Pheng-Ann Heng  
AAAI Conference on Artificial Intelligence (**AAAI**), 2018 (**Spotlight**)
- [3] *SINet: A Scale-insensitive Convolutional Neural Network for Fast Vehicle Detection*  
**Xiaowei Hu**, Xuemiao Xu, Yongjie Xiao, Hao Chen, Shengfeng He, Jing Qin, and Pheng-Ann Heng  
IEEE Transactions on Intelligent Transportation Systems (**T-ITS**), accepted for publication, 2018
- [4] *R<sup>3</sup>Net: Recurrent Residual Refinement Network for Saliency Detection*  
Zijun Deng\*, **Xiaowei Hu**\*, Lei Zhu, Xuemiao Xu, Jing Qin, Guoqiang Han, and Pheng-Ann Heng (\*joint 1<sup>st</sup> authors)  
International Joint Conference on Artificial Intelligence (**IJCAI**), 2018
- [5] *Deep Attentional Features for Prostate Segmentation in Ultrasound*  
Yi Wang, Zijun Deng, **Xiaowei Hu**, Lei Zhu, Xin Yang, Xuemiao Xu, Pheng-Ann Heng, and Dong Ni  
International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2018
- [6] *AGNet: Attention-Guided Network for Surgical Tool Presence Detection*  
**Xiaowei Hu**, Lequan Yu, Hao Chen, Jing Qin, and Pheng-Ann Heng  
Deep Learning in Medical Image Analysis and Multimodal Learning for Clinical Decision Support, pp.186-194, 2017
- [7] *Direction-aware Spatial Context Features for Shadow Detection and Removal*  
**Xiaowei Hu**, Chi-Wing Fu, Lei Zhu, Jing Qin, and Pheng-Ann Heng  
IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**) (Under Review)
- [8] *Saliency-aware Texture Smoothing*  
Lei Zhu\*, **Xiaowei Hu**\*, Chi-Wing Fu, Jing Qin, and Pheng-Ann Heng (\*joint 1<sup>st</sup> authors)  
IEEE Transactions on Visualization and Computer Graphics (**TVCG**) (Under Review)
- [9] *Bi-directional Feature Pyramid Network with Recurrent Attention Residual Modules For Shadow Detection*  
Lei Zhu, Zijun Deng, **Xiaowei Hu**, Chi-Wing Fu, Xuemiao Xu, Jing Qin, and Pheng-Ann Heng  
European Conference on Computer Vision (**ECCV**), 2018 (Under Review)

## HONORS AND AWARDS

Hong Kong Ph.D. Fellowship ( <b>Highest</b> scholarship for students study in Hong Kong)	2016 - 2020
Top 10 Outstanding Students at SCUT ( <i>Rank 1<sup>st</sup></i> , <b>highest</b> award for students at SCUT)	2016
Google Excellence Scholarship (1 of 58 winners in <b>China</b> )	2015
Tencent Outstanding Scholarship (the <b>only</b> undergraduate winner at SCUT)	2015
National Scholarship ( <b>Highest</b> national wide scholarship for undergraduate students in China)	2013
Gold Award of Pan-Pearl-River-Delta University IT Project Competition in China	2016
First Prize and Best Practical Award of University IT Project Competition in Guangdong Province	2016
First Prize of Adolescents Science & Technology Innovation Contest in Hebei Province	2011