

Yihui He

Interests

Vision CNN Model Acceleration and Compression [1, 2], Super Resolution [3], Recognition

[1], Detection, Structure from Motion, Panorama

Al Security Game [4, 5], TSP [6]

Network HTTP [7], DNS probing

Education

2014–2018 B.S., Xi'an Jiaotong University, China, 83/100, 3.25/4.00.

 $\mathsf{ranked}\ 40/180$

2016 spring exchange student, University of California, Santa Babara, CA, 4.0/4.0.

Employment

now Research Intern, Megvii Technology Inc., Beijing.

supervised by Xiangyu Zhang and Jian Sun

o ICCV 2017 (first author) paper accepted [1], TPAMI under review [2]

o keypoints aided pedestrian detection, translated into product

2016 summer Research Intern, Deepglint Inc., Beijing.

Gastrointestinal stromal tumor Image Segmentation with Computer Vision

2015 summer **Engineering Intern**, *DJI Innovations Science and Technology Co., Ltd*, Shenzhen.

build prototype intelligent robots and program embedded system

Experience

2016–2018 Member, Baidu Big Data Lab Joint Cultivation.

Data Mining research on large scale location data

2017 Undergrad Researcher, Computer Vision and Al Lab.

Super Resolution, preparing a paper [3]

2016 spring Undergrad Researcher, Prof. Xifeng Yan's Data Mining Lab, UCSB.

Image Recognition with Estimated Depth

2014–2015 Undergrad Researcher, MoE Key Lab for Intelligent Network and Network

Security.

o Security Game, a paper in revision [4, 5]

O Network, a paper under review [7]

2014 summer 2014 Robocup Junior Robot Soccer Championship.

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Languages

TOEFL 100

GRE 319+3.5

Extracurricular

- o Microsoft Beauty of Programming competition 2015, ranked 200/8000
- o Zhihu Writer with 2k followers

Publications

- [1] **Yihui He**, Xiangyu Zhang, and Jian Sun. Channel pruning for accelerating very deep neural networks. In *International Conference on Computer Vision (ICCV)*, 2017.
- [2] Yihui He, Xiangyu Zhang, and Jian Sun. Pruning very deep neural network channels for efficient inference. *IEEE transactions on pattern analysis and machine intelligence (TPAMI)*, 2017, under review.
- [3] Yudong Liang, Ze Yang, Kai Zhang, **Yihui He**, Jinjun Wang, and Nanning Zheng. Single image super-resolution with a parameter economic residual-like convolutional neural network. *arXiv* preprint arXiv:1703.08173, 2017.
- [4] Xiaobo Ma, **Yihui He**, Xiapu Luo, Jianfeng Li, and Xiaohong Guan. Vehicle traffic driven camera placement for better metropolis security surveillance. *IEEE Intelligent Systems*, in revision.
- [5] Xiaobo Ma, Yihui He, Xiapu Luo, Jianfeng Li, and Xiaohong Guan. Vehicle traffic driven camera placement strategy for metropolis security surveillance. In *P.R. Patent*, page 201610114763.8, 2016.
- [6] **Yihui He** and Ming Xiang. An empirical analysis of approximation algorithms for the euclidean traveling salesman problem. *arXiv* preprint *arXiv*:1705.09058, 2017.
- [7] Hongwei Zhao, Xiaobo Ma, Shuai Li, Xiapu Luo, Mawei Shi, and **Yihui He**. Boosting the performance of dynamic adaptive streaming over http in bandwidth-fluctuation networks: A pid-based approach. **NOSSDAV**, 2017, under review.