

Yihui He

CONTACT INFORMATION	Computer Science Xi'an Jiaotong University Xi'an, 710049, China	Phone: (+86) 18702937918 E-mail: yihuihe.yh@gmail.com WWW: yihui-he.github.io
RESEARCH INTERESTS	CNN Acceleration and Compression [2, 1, 4], Reinforcement Learning [1], Super Resolution [5], Detection [2], Depth [7], Structure from Motion, Panorama, Security Game [3], HTTP [6]	
EDUCATION	Carnegie Mellon University, PA Master, Computer Vision	2018 - 2019
	University of California, Santa Babara, CA Exchange student, Computer Science, GPA 4.0/4.0	Spring 2016
	Xi'an Jiaotong University, Xi'an, China Bachelor, Computer Science, GPA 81.4/100 (1st/2nd/3rd year rank: 22%/4%/37%)	2014 - 2018
PUBLICATIONS	<ul style="list-style-type: none">[1] Yihui He, Ji Lin, Zhijian Liu, Hanrui Wang, Li-Jia Li, and Song Han. "AMC: AutoML for Model Compression and Acceleration on Mobile Devices". In: <i>European Conference on Computer Vision (ECCV)</i>. Sept. 2018. cited by 4, [arXiv].[2] Yihui He, Xiangyu Zhang, and Jian Sun. "Channel Pruning for Accelerating Very Deep Neural Networks". In: <i>The IEEE International Conference on Computer Vision (ICCV)</i>. Oct. 2017, pp. 1389–1397. cited by 58, [CVF open access] [arXiv] [Code].[3] Xiaobo Ma*, Yihui He*, Xiapu Luo, Jianfeng Li, Mengchen Zhao, Bo An, and Xiaohong Guan. "Vehicle Traffic Driven Camera Placement for Better Metropolis Security Surveillance". In: <i>IEEE Intelligent Systems (IS)</i>. 2016. *Equal contribution, [arXiv].	
UNDER REVIEW	<ul style="list-style-type: none">[4] Yihui He, Xiangyu Zhang, and Jian Sun. "Pruning Very Deep Neural Network Channels for Efficient Inference". In: <i>IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)</i> (2017). Major Revision.[5] Yudong Liang, Ze Yang, Kai Zhang, Yihui He, Jinjun Wang, and Nanning Zheng. "Single Image Super-resolution via a Lightweight Residual Convolutional Neural Network". In: <i>IEEE Transactions on Multimedia (TMM)</i> (2017). cited by 6, [arXiv].[6] Hongwei Zhao, Xiaobo Ma, Shuai Li, Xiaopu Luo, Mawei Shi, and Yihui He. "Boosting the performance of dynamic adaptive streaming over http in bandwidth-fluctuation networks: A pid-based approach". In: <i>IEEE International Conference on Multimedia and Expo (ICME)</i> (2018).	
PROJECT REPORT	[7] Yihui He . <i>Estimated Depth Map Helps Image Classification</i> . May 2016. [arXiv] [Code] .	
SERVICE	Reviewer for IEEE Transactions on Image Processing (TIP , AE: Prof. Jie Liang).	
RESEARCH EXPERIENCE	MIT <i>Research Assistant with Prof. Song Han</i> <ul style="list-style-type: none">• Automated CNN compression [1]. Successfully compressed NASNet, MobileNet.	Oct, 2017 - Dec, 2017

	Johns Hopkins University <i>Research Assistant with Prof. Alan Yuille</i> <ul style="list-style-type: none"> Visual concepts for fewshot detection. Detectors emerged from visual concepts. 	Aug, 2017 - Nov, 2017
	Megvii Inc. (Face++) <i>Research Intern with Dr. Xiangyu Zhang and Dr. Jian Sun</i> <ul style="list-style-type: none"> Pruning CNN channels [2]. VGG-16 $5\times$ with negligible accuracy loss. Head boxes aided pedestrian detection. Distinguish overlapped pedestrians by detecting heads. Object detection with confidence scores on each edge of bounding box. 	Dec, 2016 - Aug, 2017
	Xi'an Jiaotong University <i>Undergrad Researcher in Computer Vision and AI Lab</i> <ul style="list-style-type: none"> Super resolution [5], supervised by Jinjun Wang. <i>Undergrad Researcher in Intelligent Network and Network Security Lab</i> <ul style="list-style-type: none"> Traffic driven camera placement [3], supervised by Xiaopu Luo. PID-based streaming over http [6]. <i>Baidu Big Data Lab Joint Cultivation student</i> <ul style="list-style-type: none"> Data mining on large scale location data. 	
INDUSTRY EXPERIENCE	Deepglint Inc. <i>Engineering Intern</i> <ul style="list-style-type: none"> Gastrointestinal stromal tumor Image Segmentation. 	June 2016 - Aug 2016
HONORS AND AWARDS	Baidu Big Data and AI scholarship Siyuan scholarship, Xi'an Jiaotong University Outstanding student, Xi'an Jiaotong University RoboCup Junior Soccer Challenge, 1st place RoboCup Junior Soccer Challenge, 3rd place	2018 2016-2017 2016 2014 2012
PROJECTS	Deep Learning GPU (CUDA) and C Multi-view Geometry NLP	pruning , U-Net , Depth , GAN , ResNet (515 stars on Github) depthwise-conv , c compiler (44 stars on Github) panorama , SfM , notes (71 stars on Github) NER , RNN , notes (36 stars on Github)
EXTRACURRICULAR	Writer in Zhihu with 3k followers Go Amateur 2 dan	