



JIANZHONG HE

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in Jianzhong

🐙 github.com/pkuCactus

🎓 EDUCATION

Peking University (PKU), Beijing, China

2016 -- 2019

Master in Electronics Engineering and Computer Science (EECS)

Sichuan University (SCU), Shichuan, China

2012 -- 2016

B.S. in Computer Science (CS)

👥 EXPERIENCE

Horizon Robotics Inc. Beijing, China

May 2018 -- May 2019

Intern Manager: Yanhu Shan

Brief introduction: Make research on city scene understanding for automatic drive.

- Improve the segmentation model to achieve about 1% better performance,
- Propose an algorithm to use edge improve segmentation,
- Combine edge detection and segmentation to optimize them jointly

IBM Club, Shichuan University. Shichuan, China

2014 -- 2015

Vice president

Brief introduction: Study the knowledge of mainframe.

- Assistant to the mainframe course,
- Lead members to the mainframe competition

Web Development Association, Shichuan University. Shichuan, China

2014 -- 2015

Vice president

Brief introduction: Study of web development technique.

- Hosting a web development contest,
- Hosting web development knowledge lectures

🏢 PROJECTS

Vehicle Re-identification based on deep learning

May. 2017 -- Sep. 2017

- Brief introduction: The task is to find the images of same vehicle with the query vehicle from gallery datasets without the plate number.
- Main work: Classify the model of vehicles and re-ranking the finally result

Real time road lane detection based on traditional method

Apr. 2016 -- Oct. 2016

- Brief introduction: To assist the vehicle driving, achieve real time road lane detection while driving. We achieve it by using traditional methods.
- Main work: Design the model and complete the coding.

Smart home management system based on the raspberry pi

Mar. 2014 -- Nov. 2014

- Brief introduction: Remote monitoring and management of smart home appliances system, through the raspberry PI Intranet server, monitoring and control home appliances.
- Main work: The transportation of information and control of smart home appliances.

PUBLICATION

Jianzhong He, Shiliang Zhang and *etc.*, Bi-Directional Cascade Network for Perceptual Edge Detection[C]//Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.

Jianzhong He, Xiaobin Liu and Shiliang Zhang, EAGER: Edge-Aided imaGe understanding System[C]// Proceedings of the 2019 ACM on International Conference on Multimedia Retrieval (**ICMR**), 2019

SKILLS

- Programming Level: Familiar with C, C++ and Python ect. programming language and Caffe, Pytorch and MXNET etc. deep learning frame work. And with some knowledge of SQL, HTML and Javascript etc.
- Research Field: I'm interested in edge detection and image segmentation, and has some knowledge of Object detection, person re-id and fine-grained classification.
- English: CET-6(479)

HONORS AND AWARDS

Merit Student, Peking University 2018

Postgraduate special scholarship of EECS, Peking University Dec. 2017

IBM mainframe application of 2014 national campus competition, *Single Group, 2nd Prize and Team Group, 3rd Prize* Dec. 2014

The 39th ACM-ICPC international collegiate programming competition, Xi'an, Asian regional competition, *Bronze medal* Oct. 2014

The 5th "blue bridge cup" national software and information technology talent competition, *1st Prize of Province and 3rd Prize of National* May. 2014

"Challenge cup" web design competition of sichuan university, *2nd Prize* Nov. 2013

National Scholarship, Sichuan University comprehensive first class scholarship 2014 -- 2015

IBM Outstanding Student 2015 Scholarship Dec. 2015

Sichuan University comprehensive second class scholarship, National Inspirational Scholarship 2013 -- 2014