Kerui Gu

Room104, West 18#, Shanghai Jiao Tong University, Shanghai, 200240, P. R. China

(+86)1333-816-5703   lovekjam@sjtu.edu.cn

EDUCATION

School of Electronic Information and Electrical Engineering, Shanghai Jiao Tong University   Sep 2016 - Present

Bachelor in Micro/Nano Electronics, Major: 86/100, Year of 2016: 89/100(Ranking 15/769)

Core Courses in CS&EE: Fundamental of Object Oriented Programming(86, Top 4%), Algorithms, Operating System(90, top 1%), Computer Architecture.

School of Computer Science and Engineering, Nanyang Technological University   Aug 2019 – Dec 2019

Courses in CS&EE: Computer Network, Computer Vision, Artificial Intelligence.

RESEARCH EXPERIENCES

Media and Vision Computing Lab, Nanyang Technological University, Singapore   July 2019 - Present

Advisor: Guosheng Lin, Assistant Professor, Nanyang Technological University

Project: Enforcing geometry constraints on depth prediction and plane detection.

➢ Enforced geometry constraints, plane normal to enhance the performance of depth prediction and plane detection.

➢ Recurrented PlaneRCNN and made innovations to better detect plane by improving the network architecture.

John Hopcroft Center for Computer Science, Shanghai Jiao Tong University, China   Aug 2018 – June 2019

Advisor: Quanshi Zhang, Associate Professor, Shanghai Jiao Tong University

Project: Interpretable CNN

➢ Recurrented the Born-Again Neural Network and compare the different performance on the different layers of ResNets.

➢ Worked to build an framework to quantify interpretability of deep visual representations, trying to illustrate texture and part can interpret most of the information of deep neural network.

➢ Visited the town of AI in Hangzhou, Zhejiang Province, China, and communicated with the engineers there.

➢ Led a team with three members and use an unsupervised way to give each filter an disentangled semantic.

Innovative Architecture and Technology Lab(iCAT), Shanghai Jiao Tong University, China   May 2018 - Aug 2018

Advisor: Yuzhuo, Fu, Professor, Department of Micro/Nano Electronics, Shanghai Jiao Tong University

Project: Improve SqueezeNet and Applying into Integrated Circuit

➢ Proposed to utilize a combination of Yolov3 tiny and squeezeNet, developing a brand-new model to detect whether there exists a boat.

➢ Presented the idea that squeeze all the 3*3 matrixes firstly into 1*1 matrixes and then expand them to combined matrixes which contain both 1*1 ones and 3*3 ones.

AWARDS

Temasek Foundation Scholarship for Asian excellent students	June 2019
Excellent student in Shanghai Jiao Tong University(2 in 60)	Dec 2018
Scholarship for excellent student in Shanghai Jiao Tong University	Apr 2018
Huaying Award in Changzhou(Top 1.6‰)	Aug 2016 - present
First prize in the national physic competition(Top 1‰)	Oct 2015

LEADERSHIP AND ACTIVITIES

Association Union, Shanghai Jiao Tong University | Vice President   Apr 2018 - Present

➢ Recognized for the Outstanding Student Leadership at Shanghai Jiao Tong University, given to 10 out of 4000 students

➢ Responsible for anniversary celebration involving over 30,000 teachers and students.

SEIEE Volunteer, School of Electronic Information and Electrical Engineering   Apr 2016 - Present

➢ Awarded for outstanding young volunteers(10 of 8000).

➢ Volunteered in School for the deaf and dumb, Minhang District, Shanghai, China, for a whole year.

SKILLS

Extensive programming, solid expertise on Pytorch, C++, Python, Matlab;

Proficient in software development in Linux and Windows;

Language: TOFEL(101), GRE(318)