Jiayi Yang

+86 136 8359 1407 | markyang@bupt.edu.cn | http://jiayiyang.info

EDUCATION

Beijing University of Posts and Telecommunications *Beijing, China*
Junior Student of Telecommunication Engineering *Sep 2016 - Present*

- *GPA: 90/100 (Rank 10/319)*
- *Relevant Coursework: Advanced Mathematics, C Programming Basics, Computer Basics, Java Programming Basics, Database, Advanced Network Programming, Data Structures*
- *TOEFL: 117/120(Speaking 29)*
- *Honors/Awards: 1st Class Scholarship of BUPT(2016-2017,2017-2018)*

Tsinghua University *Beijing, China*
Research Intern at Center for Brain Inspired Computing Research *Jul 2018 - Present*

- *Advised by Prof. Guoqi Li*
- *Research Area: Quantization of Neural Network, Large Scale Implementation of Spiking Neural Network*

RESEARCH EXPERIENCE

Large Kernel Spatial Pyramid Pooling for Image Segmentation, Beijing, China
Beijing University of Posts and Telecommunications Apr *2018 - Nov 2018*
Group Leader, Advised by Prof. Junli Yang

- *Initiated a timeline for the project and distributed tasks to group members*
- *Designing an demonstration that performs live semantic segmentation in the webpage*
- *Developed a new Spatial Pyramid Pooling method that significantly improves Accuracy of DeepLabv3+ on remote sensing image segmentation by 1%(measured in mean IoU)*

Quantization of Training and Inference for Fully Convoluted Network, Beijing, China
Tsinghua University Nov *2018 - Present*
Research Intern at Center for Brain Inspired Computing

- *Expanded the work of Quantization of training and inference of shallow CNN to large scale CNN*
- *Research on training and inferencing fully convoluted network (FCN) with quantized variable*
- *Adapted quantized Batch Normalization to achieve full quantization of neural network*

PROJECT EXPERIENCE

Demonstration Platform of "Tianji" Chipset, Tsinghua University Beijing, China
Research Intern at Center for Brain Inspired Computing *Jul 2018 - Aug 2018*

- *Built web application using UDP for short distance transmission of data and result for the simulation system.*
- *Design specific quantized Convolutional Neural Network for simulation.*
- *Mapping and simulation of Convolutional Neural Network on "Tianji" Brain Inspired Computation chip set .*

Large Scale Implementation of Spiking Neural Network, Tsinghua University Beijing, China
Research Intern at Center for Brain Inspired Computing *Jan 2019 - Present*

- *Initiated timeline for the project and distributed tasks to group members*
- *Expanded the work of Training and Inference of SNN on larger Structures and Bigger datasets*
- *Simplified the implementation on Pytorch to train on devices with less memory*

OTHERS

- *Programming Skills*：*MATLAB*，*Python*，*C/C++*，*Java*
- *Application Skills: VHDL, Linux*
- *Machine Learning Platforms: Tensorflow, Pytorch*