

Jiayi Yang

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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 Research

- 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 Research

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 Research

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