XUETING LI

 $(+86) \cdot 13520682506$

xuetingli@foxmail.com

sunshineatnoon.github.io

EDUCATION

Tsinghua University

2013.9 - 2016.6

M.S. in Software Engineering

Overall GPA: 3.92/4.00 (91.5/100.0)

Ranking: top 5%

Beijing University of Posts and Telecommunications

Sep 2009 - July 2013

B.S. in Computer Science

Overall GPA¹: 3.46/4.00 (84.5/100.0)

Ranking: top 10%

TECHNICAL SKILLS

Background Knowledge in Computer Vision and Deep Learning

With two-year research experience on computer vision and deep learning, I am very familiar with both the underlying theories, related tools and frameworks, especially on the following:

- The architectures of deep learning models and neural networks such as NN, CNN, RNN and LSTM
- The popular object detection algorithms such as fast RCNN and SPPNet
- The algorithms used in training neural networks such as gradient descent
- The machine learning algorithms such as logistic regression and SVM

Programming Language & Software Tools

- **Python**: Three-year experience with python programming, familiar with the Caffe python interface as well as python libraries and frameworks such as Numpy, Theano and Keras
- C/C++: Two-year experience with C/C++ programming, familiar with Caffe deep learning framework which was implemented in C/C++
- Matlab: Familiar with Matlab programming, able to develop prototype of novel algorithm in a short time

RESEARCH EXPERIENCE

Intel, Inc

July 2015 - Present

Deep Learning Intern

Beijing, China

• Conducted a survey on deep learning platforms in top enterprises such as Baidu, Tencent, Google and Microsoft. Studied their published papers on these platforms and gave a tech report on this topic

¹Both GPAs are caculated by WES iGPA Calculator

- Setup up different deep learning frameworks such as Caffe (both CUDA and OpenCL backend) and IDLF (Intel Deep Learning Framework). Conducted the benchmarking on Intel i7-4790 CPU with HD Graphics as well as Nivida Quadro K4000 Graphics card and wrote a detailed benchmark report
- Modified the original fast RCNN and faster RCNN code so that they can be trained on the ImageNet dataset
- Implemented detection algorithm in the paper You Only Look for Once in keras with Theano as its backend
- Built a recommendation system prototype based on deep learning algorithms.
 - The prototype composes of an advertisement dataset with product images from eBay and Amazon, a website frontend implemented in Django and a deep learning computing cluster running object detection and recommendation algorithms implemented in python and Caffe
 - The deep learning computing cluster detects objects such as backpacks, cars and laptops in the image uploaded by a user
 - The system will also compute and rank the commodities in our advertisement dataset based on deep feature distance against the detected objects and recommend most similar ones to the user
- Implemented a smaller YOLO network for object detection in Keras with Theano backend and trained it on Pascal Voc 2007 and 2012.

Beijing University of Posts and Telecommunications, Lab

 $Februay\ 2014\ -\ June\ 2015$

Computer Vision Research Assistant

Beijing, China

- Conducted research on image classification algorithms and implemented a novel image classification algorithm in MATLAB with the professor to solve the in-class diversity problem of image classification:
 - The algorithm bases on a tree structure and clusters images using one type of feature such as HOG or SIFT on each layer, so that objects in each cluster of the last layer have minimum diversities
 - considers each cluster of the last layer as positive samples, other clusters as negative samples and trained a SVM classifier for each leaf node cluster
 - uses the trained SVMs to determine the class of an image
- Implemented a Convolutional Neural Network in MATLAB, which:
 - gets an accuracy of 96.57% on MNIST
 - has arbitrary convolutional and pooling layers
 - can be easily defined by MATLAB code

AWARDS & HONORS

Scholarships

The First Prize Scholarship of Tsinghua University

2014

The Second Prize Scholarship of Beijing University of Posts and Telecommunications

2010,2011,2012

Competitions

Third Place in Programming Competition of BUPT

2011,2012

Third place in National English Contest for College Students

2012

ENGLISH LEVEL

TOFEL: 107 (Reading:28; Listening:30; Speaking:23; Writing:26)

September 2015

GRE: 327+3.5 (Verbal:160; Quantitative: 167; Analytical Writing: 3.5)