XUETING LI

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EDUCATION

Tsinghua University *Sep 2013 - July 2016(expected)*
M.S. in Software Engineering
Overall GPA: 3.92/4.00 (91.5/100.0)
Ranking: 6 out of 136

Beijing University of Posts and Telecommunications *Sep 2009 - July 2013*
B.S. in Computer Science
Overall GPA[1]: 3.46/4.00 (84.5/100.0)
Ranking: 42 out of 342

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 and related tools 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 such as Numpy and Theano
- **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
- 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 and trained them on the ImageNet dataset instead of Pascal VOC dataset
- Built a recommendation system prototype based on deep learning algorithms.

[1]Both GPAs are caculated by WES iGPA Calculator

- 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 backend implemented in python and Caffe
- The deep learning computing cluster detects objects such as backpacks, cars and laptops in the image uploaded by user
- The system will also compute and rank the commodities in our advertisement dataset based on deep feature distance against the detected objects

Beijing University of Posts and Telecommunications, Lab *February 2014 - June 2015*
Computer Vision Research Assistant *Beijing, China*

- Conducted research on image classification algorithms and implemented a novel images 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 features 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 on these samples
  - uses the trained SVM 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

Tsinghua University, Lab *Sep 2013 - Present*
Development Engineer *Beijing, China*

- Designed and built a POI(Point of Interest) Classification system, which
  - scrapes POI data from website using python Scrapy
  - parses Chinese POI labels into single words
  - forms a dictionary based on their information gains
  - transforms Chinese POI labels to word vectors based on the dictionary
  - predicts classes of these Chinese POI labels using Bayes classifier, the precision of this system is about 88%

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*

STANDARDIZED TESTS

TOFEL: 107 (Reading:28; Listening:30; Speaking:23; Writing:26) *September 2015*
GRE: 327+3.5 (Verbal:160; Quantitative: 167; Analytical Writing: 3.5) *July 2015*