HAOHAN BO

haohao.bo@mail.mcgill.ca | +1 (514) 746-8419

Education

Master of Science, Computer Science

Montreal Quebec Canada

09/2017 - Present

McGill University GPA: 4.0/4.0

Bachelor of Engineering, Software Engineering

Wuhan, Hubei, China

Wuhan University

GPA: 3.76/4.0 (Ranking: 10/285)

09/2013 - 06/2017

Experience _____

Computer Vision Intern SenseTime Group Limited

Shenzhen, Guangdong, China

10/2016-04/2017

Supervised by Dr. Zhanghui Kuang

Intelligent Review of Images using Deep Convolutional Neural Network

- Implemented Online Labeling System using Python, PyQt4, Requests.
- Improved and Trained Convolutional Pose Machines to generate ROIs and heatmaps of human in images
- Designed and implemented the Attention and ROI based Convolutional Neural Network for classification.
- Trained the Neural Network using Caffe based on cost-sensitive strategy with millions of data.
- Implemented the Software Development Kit using C++. https://master.sensetime.com/web/demo/#/filter/filter_np

Research Assistant

Waterloo, Ontario, Canada

07/2016-09/2016

University of Waterloo Supervised by Prof. Shi Cao

Implemented Augmented Reality application on Google Tango Tablet using Unity 3D in C#.

Research Assistant

Wuhan, Hubei, China

Laboratory of Bioinformatics, Wuhan University

Supervised by Prof. Feng Liu

10/2015-07/2016

Recognition of Relationships of Genes Using Deep Learning

- Developed web spiders using selenium in Python.
- Designed and trained Convolutional Neural Network through NLTK, genism(Word2Vec) and TensorFlow.
- Implemented the website to display result of the algorithm using HTML5, CSS3, JQuery and Flask.

Research Assistant

Wuhan, Hubei, China

Big Data & Cloud Computing Lab, Wuhan University

Supervised by Prof. Weiping Zhu

06/2015-10/2015

Intelligent Web Crawler System

- Designed the architecture of web crawler based on Scrapy in Python. •
- Implemented a dozen website crawlers through Requests and BeautifulSoup.
- Designed the database and stored data in MySQL.
- Developed the main control system of crawlers.
- Implemented data cleaning tools through SVM, Naive Bayes and Convolutional Neural Network based on NLTK, Scikit-learn, and Tensorflow.

Group Leader of Web Front-End

Zigiang Portals, Wuhan University

Wuhan, Hubei, China 05/2015-09/2013

Website Projects

- Implemented the front-end of websites, such as the like landing page ("mobile.ziqiang.net.cn"), introduction page, and vote page ("topten.ziqiang.net.cn"), among others, using HTML5, CSS3, and jQuery.
- Managed all the projects of the front-end developer group.
- Trained new students with front-end technologies.

CAPTCHA Recognition Chrome Extension of Educational Administration Management System

- Obtained CAPTCHA from the website using HTML5, Ajax and Javascript.
- Using Django on the back end to respond to requests.
- Designed the Convolutional Neural Network based on VGG with improvements using batch normalization.
- Implemented the functions related to the calculation of GPA and average of selected courses.

Skills

Programming Languages:Python, Java, C++, JavaScript, SQL, C#, MATLABFrameworks:Caffe, Tensorflow, OpenCV, Unity 3D, Scrapy, jQuery

Other: HTML5, CSS3, Git, Linux, MacOSX

Awards & Scholarships _____

Globalink Fellowship MITACS	2017
Globalink Research Internship Award MITACS	2016
Second Class Scholarship (Top 10%) Wuhan University	2015
First Class Scholarship (Top 5%) Wuhan University	2014
Merit Student Wuhan University	2014, 2015
First Prize, Festival of Software Culture in Central China	2014

Extra Curricular Activities

Hackday, Programming Marathon in Central China

05/2014

 Implemented (within 24 hours) an extension of Chrome, which is in Javascript, that aims to prevent people from substantially indulging in online shopping.

Personal Projects _____

Learning Flappy Bird Game Using DQN (Tensorflow)
Tencent Captcha Recognition Using MobileNet (Keras)