Zexi Han

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Availability: May 2019

EDUCATION

Northeastern University (NU), Boston, MA   Jan 2017-Present

College of Computer and Information Science, GPA: 3.8/4.0   Expected Graduation: May 2019

*Candidate for a Master of Science in **Data Science***

> Relevant Courses: Algorithms, Machine Learning, Computer Vision, Large-Scale Parallel Data Processing

Beijing University of Posts and Telecommunications (BUPT), Beijing, China   Sept 2012-Jun 2016

Joint Program with Queen Mary University of London (QMUL), GPA: 3.5/4.0

*Bachelor of Science in **Telecommunications Engineering**, with the First Class Honors*

> Relevant Courses: Data Structures, Intro to Artificial Intelligence, Software Engineering, Calculus, Linear Algebra, Probability Theory and Stochastic Process, Principles of Communications
>
> Awards: BUPT Outstanding Final Project (Rank 12/680)

TECHNICAL SKILLS

Languages:	Python, Java, SQL, R, Matlab
Machine Learning:	Linear/Logistic Regression, SVM, Tree-based, Neural Networks, Clustering, PCA, etc.
Database:	Amazon S3, Oracle Database, Snowflake
Tools:	Tensorflow, Caffe, OpenCV, Amazon ECS, Docker, RStudio, Git, Linux

PROFESSIONAL EXPERIENCE

Data Scientist (Co-op) at Rue Gilt Groupe   Jan 2018-Jun 2018

- Worked on feature engineering and training XGBoost model from an iterative perspective to identify suspect resellers from over 2 million buyers, and put it into production as a block for the recommendation engine.
- Built docker apps for feature extraction, training and inference which were deployed to Amazon ECS and Airflow.

Graduate Teaching Assistant at Northeastern University – CS6140 Machine Learning   Sept 2017-Dec 2017

- Led TA and review sessions, provided timely and appropriate feedback to students' doubts to support their learning.
- Delivered teaching activities including tutorials directed towards building various machine learning models.

Research Assistant at Tsinghua University – Edge Sensing Interaction for Smartwatch   May 2016-Jul 2016

- Discovered the accelerometer's data collected by tapping the edge of the smartwatch from 4/6/8 directions.
- Collected and preprocessed the accelerometer's data with Python in different scenes of life.
- Classified the tapping motion with logistic regression model and developed the Android Wear demo.

Research Assistant at Chinese Academy of Sciences – Image Retrieval with Deep Learning   Aug 2015-May 2016

- Built a Three-stage Hybrid Image Retrieval Framework (Classification, Object Detection and Matching) to the task of same-design product image retrieval with convolutional neural networks.
- Experimented on the ALISC 5 million product image dataset with multiple CNN models using Caffe.
- Developed the backend of Android demo and achieved real-time same-design product image retrieval.

PROJECT EXPERIENCE

Data Mining on Yelp and Census Data, NU   Sept 2017-Dec 2017

- Extracted neighborhood-level features of business dynamics from Yelp dataset.
- Employed different clustering techniques to investigate the relationship between business dynamics and neighborhood dynamics.

Video Classification on YouTube-8M Dataset, NU   Mar 2017-Apr 2017

- Developed a classifier with TensorFlow that could assign the class label based on given features of the video using a subset of the Google's large-scale YouTube-8M dataset.
- Compared the model and accuracy performance of different machine learning algorithms (LR, SVM, ANN).

Life and Death of Great Open Source Projects, NU   Mar 2017-Apr 2017

- Collected, cleaned and processed repository activity data (issues and commits) from GitHub with R.
- Analyzed activity patterns for projects of different popularity and identified indicators and significant factors that are most directly related to a certain pattern.

Design & Build Winter Hack in London, QMUL   Oct 2015-Feb 2016

- Programmed for the object detection and color recognition algorithm with Python.
- Designed and implemented interactive motions for NAO Robot in Aldebaran.