

**Wenqing Cao**  
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## Education

**University of Southern California** (Los Angeles, CA)

Master in Computer Science

January 2016 – December 2017

**Nanjing University of Posts and Telecommunications** (China)

Bachelor in Computer Science

September 2011 – June 2015

## Experience

**Software Engineer Intern at DromeBox Labs/ ModCon IP (Python)**

Summer 2016

- Developed a program using OpenCV and PCL to construct 3D point cloud models of a room from images taken by Kinect.
- Participated in calibration and removed redundant points from 3D models.

**Software Engineer Intern at Jiangsu HongXin System Integration Co.**

Winter 2014

- Analyze the tourism information, set up a MySQL database and build tables
- Developed an Android -prototype with a team of five to display tourism information.

## Projects

**Machine Learning Projects (Python)**

Aug 2017 – Nov 2017

- Used Numpy to Implemented CNN to classify MNIST data.
- Implemented logistic regression, SVM, GMM and PCA algorithms.

**Applied Natural Language Processing Projects (Python)**

Jan 2017 – May 2017

- Built a user information prediction model based on SVM to predict a user's gender, age, and education information given their search keywords.
- Wrote a part-of-speech tagging program based on HMM to tag words grammatical structure, such as verb, noun or preposition.
- Wrote language translation grading program based on BLEU.

**Information Retrieval and Web Search Engine (Java)**

Jan 2017 – May 2017

- Built an engine on Google Cloud Platform to invert index large scale data with Hadoop and MapReduce.
- Built a web search engine with spell correction and autocomplete functions based on Solr.

**Web Development Experiences(JavaScript, Java, PHP)**

Sep 2016 – Dec 2016

- Deployed a website on AWS Beanstalk to retrieve US Congress information.
- Wrote web application using JavaScript with AngularJS and Bootstrap to display congress information.
- Developed an Android client to render the same data as the web client.

## Skills

**Programming Languages:** Java, C++, C, Python, JavaScript, PHP

**Tools:** AWS, Google Cloud Platform, Hadoop, Git, MySQL

**Academic focus:** Machine Learning, Natural Language Processing, Big Data

**Libraries and Frameworks:** Scikit-learn, OpenCV, TensorFlow, Numpy, Angular JS