## Hao Han

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**EDUCATION**: Stevens Institute of Technology, Hoboken, NJ

Master of Science in Business Intelligence & Analytics

GPA: 3.72

Courses: Web Analytics, Engineering Programming in C++ and Java, Social Network Analysis

Financial Decision Making, Statistical Learning and Time Series Analysis (Machine Learning), Knowledge Discovery in Databases, Process Optimization and Analytics, Multivariate Analysis, Big Data Seminar

Dec 2014

May 2012

March 2014 - July2014

Beijing University of Post & Telecommunications, Beijing, China

Bachelor of Science in Applied Mathematics Concentration in Computational Science

GPA: 3.22

Courses: Mathematical Analysis, Advanced Algebra, C++ Programming, Data Structures and Algorithms,

Operating System, Numerical Analysis and Scientific Computation

SKILLS: Software: Gephi, Apache 2, MySQL, Drupal 7, D3.JS, Weka, Eclipse,

Hadoop, MapReduce, Hive, Pig

Python, Java, R, SAS, SQL, HTML, JS, CSS Languages:

Microsoft Windows, Linux Ubuntu and Mint, Mac OS **Operating System:** 

Other: Fluent in English and Mandarin

WORK Stevens Institute of Technology, Howe School, Hoboken, NJ

**EXPERIENCE**: Graduate Assistant/Web Master:

June 2013 - April 2014

Develop, maintain and update content for the Howe School web site using Drupal 7

Researched Business Analytics programs in the United States using web crawling and text mining techniques in Python

AnBang Insurance (Group) Inc, Beijing, China

Data Analyst: Feb - Dec 2008

Participated on a project to implement a sales analysis reporting system

Collated and reported weekly, monthly and quarterly metrics to the sales director

Appeard Inc, New York, U.S.

Backend /data Intern:

Using python to mining the customer database with RFM analysis.

Visualized customer migration in RFM by D3.JS, Jquery and Python.

Developed a fraud detection model using Python in backend

**PROJECT** 

Stevens Institute of Technology, Hoboken, NJ

#### **EXPERIENCE: Hadoop Analytical Infrastructure**

- Construction, design and configuration of an analytical infrastructure that would allow researchers and students leverage the power of parallel computing.
- The project consisted of constructing and configuring a Hadoop cluster containing 14 nodes. This project is expected to grow to 114 machines in the near future. Different analytical tools have been added (Pig. Hive, MrJob) to support researchers

### **News Influence on Stock Price**

- Aligned news to stock prices and scored them based on the relative movement of the stock price during the window of influence
- Identified three movement classes and trained a Naïve Bayesian text classifier to the movement classes
- Built a web application using Python and Django for forecasting the movement of the stock price
- This application is now available at: http://www.recengine.org/main/

# Best Recipe - Web Application

- Used Kiva data to evaluate a potential loan request whether it is likely to default, given past history of amount requested
- Wrote Mapper –reducer scripts in three different approach: Hadoop streaming, Mrjob, Java to test the efficiency of different approach
- Implemented with the Hadoop cluster which has 13 datanodes and 1 namenode and develop the confusion matrix

#### Bank of America - Sentiment Analysis

Harvested and cleaned data from Twitter API and YouTube API using Python

- Performed Sentiment Analysis on BofA tweets and two competitor banks; used R to test for statistical differences
- Graphed the location of tweets about BofA in the U.S. using D3.js
- Classified YouTube comments about BofA using the NaiveBayes algorithm Stevens Institute of Technology Business Intelligence & Analytics Club, *Treasurer* Stevens Institute of Technology Sigma Club, *Member*

Available to work from: Dec 2014

**ACTIVITIES**: