

**BINGYU WANG**  
(617) 750-6151 • rainicy925@gmail.com  
8 Landing St., Boston, MA, 02128

## Education

---

**Northeastern University** Boston, MA  
*Candidate for a Master of Science in Computer Science, GPA: 3.72/4.00* *Dec 2014*

**Core Courses:** Algorithm · Machine Learning · Data Mining · Parallel Data Processing in MapReduce  
· Computer Systems · Computer Networks · Programming Design Paradigm

**Honors and Activities:** Teaching Assistant for Machine Learning class (2013 -2014)  
20th ACM SIGKDD Conference (New York City, Aug 2014)  
Big Data Technology Conference (Boston, April 2014)

**Northwestern University** Xi'an, China  
*Bachelor of Engineering in Software Engineering, GPA: 3.30/4.00* *June 2012*

**Core Courses:** Object Oriental Technique & C++, Java Program Designing · Algorithm Data Structure  
· Web Design and Technology · Database System · Linear Algebra · Probability Theory

**Honors and Activities:** University First Scholarship & Excellent Student Award (2010 - 2011)  
· 1st Prize in Professional Computer Knowledge Competition (2010).

## Publications

---

“Topic-Factorized Ideal Point Estimation Model for Legislative Voting Network” *ACM SIGKDD 2014*

## Professional Experience

---

**MassMutual Financial Group, Boston, MA** *Jan-June 2014*  
*Data Analyst Coop(Python)*

- Recognized the pattern and performed analysis and predictions on the web log data of Oppenheimer Website using the Aster Express Tool from Teradata
- Analyzed the MassMutual HR data and produced the predictions on the Quality of Hire
- Performed twitter analysis for GeoAnalytics project to collect data from twitter using sentimental keywords and find out the areas where MassMutual can promote the sales

**Federal Home Loan Bank, Boston, MA** *June-Aug 2013*  
*Information Technology Intern (Java)*

- Developed a Test Automation Framework that can easily be used to test different web based projects using various technologies, such as Selenium, Open2Test and Eclipse
- Delivered documentations, including test script based on SharePoint, test results covering test suite execution and screenshot, and user manual for non-computer staff

**Software Engineering Laboratory, Northwestern Univ., Xi'an, China** *Feb-Nov 2011*  
*Student Data Analyst (MATLAB)*

- Designed models of data warehouse, including concept, logic and physics models
- Eliminated redundant and obsolete data through applications of various algorithms
- Built prediction models from vast data source using data mining techniques

## Project Experience

---

**Research on Web Page Ranking: Based on Learning to Rank Algorithms** *2013*

- Implemented the RankBoost and Gradient Boosting Decision Tree Algorithms to perform the web page ranking task
- Improved the accuracy by building decision tree in heap structure and increased the running speed by simplifying the squared error formula and sorting the features
- Reduced the running time from several hours to almost half an hour on 1GB datasets

**Solving The Issue of Mazes: Shortest Path Based-on Genetic Algorithm, Capstone** *2012*

- Coded the front-end GUI for generating and configuring mazes using MFC in C++
- Studied and developed a new genetic algorithms (sub-optimal) to search for shortest path under various population size, length of gene, mutation rate and crossover rate
- Evaluated and assessed performance and attribute of the algorithm on various platforms

## Computer Knowledge

---

- Programming Languages (Proficiency): Java, Python, MATLAB
- Programming Languages (Familiar): C, C++, LaTeX
- Operating Systems and Databases: UNIX-Like (Mac OS X, GNU/Linux), SQL Server 2000, SQLite
- Web and Mobile Development: D3.js, Android Development