

**BINGYU WANG**  
(617) 750-6151 • rainicy925@gmail.com  
36 Island View Place, Dorchester, MA, 02125  
Availability: Jan. 2015 onwards

## Education

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**Northeastern University** Boston, MA  
*College of Computer & Information Science* *Sep 2012 - Present*  
*Candidate for a Master of Science in Computer Science, GPA: 3.72/4.00* *Dec 2014*

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

**Honors and Activities:** Master Assistant for Machine Learning class (2013)

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

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

**Honors and Activities:** Ranking: 7/141 · University First Scholarship (2010 - 2011)  
· Excellent Student Award (2010 - 2011) · University Second Scholarship (2009)  
· 1st Prize in Professional Computer Knowledge Competition (2010).

## Computer Knowledge

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- 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

## Professional Experience

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

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

**Xi'an JiaZhong Science and Technology Co. Ltd, Xi'an, China** *June-Aug 2010*  
*Software Engineer (Java)*

- Built a news database system capable of creating/reading/updating/deleting news in SQL Server
- Coded the middleware connecting the front-end and database in SQL Server with JSP, Servlet and JavaBean techniques
- Followed testing standards and completed documentation and reports

## Project Experience

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**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