Xiaodan Zhang

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EDUCATION

University of Illinois at Urbana-Champaign   **Urbana-Champaign, IL**
- Major: Computer Science   **Master of Science,** December 2015 (expected)
- GPA: Available upon request
- Concentration: Text mining, Information Retrieval

University of Illinois at Urbana-Champaign   **Urbana-Champaign, IL**
- Major: Statistics and Computer Science   **Bachelor of Science,** May 2014
- Minor: Informatics, Mathematics
- GPA: Available upon request
- **Departmental Honor**: Distinction STAT/CS

WORK EXPERIENCE

Department of Computer Science, *Teaching Assistant*, University of Illinois, Champaign, IL   **August 2014 – Present**
- Help monitor student teams and their progress in Senior Project I (CS 492) class

Bazaarvoice, Inc., *Software Engineer Intern*, Austin, TX   **June 2014 – August 2014**
- Worked on Data Services team to help rebuild the Universal Brand Catalog that enables content moderators to view brand candidates and validate their legitimacy alongside validating their associated synonyms
- Worked as a data wrangler to clean, transform, group and analyze brand data using Python and text mining techniques
- Web Crawled brand name lists using Scrapy framework
- Worked on back-end to design and implemented API definitions using Java and Dropwizard framework
- Built, released and deployed the project using Jenkins

NeuStar, Inc., *Data Science Intern*, Neustar Innovation Center, Champaign, IL   **June 2013 – May 2014**
- Analyzed large scale DNS traffic data stored in the Hadoop cluster using HiveQL, Python and Shell scripts
- Wrote Hive UDFs (e.g. substring_index function in SQL, etc.) in Java to process the domain name field
- Visualized the traffic data in Tableau by creating geographical Heat maps, Bar charts, Bubble graphs, etc.
- Built a DNS Dashboard for displaying plots generated by Tableau of major characteristics and descriptive statistics like Traffic, Response time, Response rate based on different Domains and Nodes
- Utilized Machine Learning techniques to build models for detecting DDoS attacks

CS357 Numerical Analysis I, *Undergraduate Grader,* University of Illinois, Champaign, IL   **January 2012 – December 2012**
- Graded the written homework, programming assignments (in Python/Matlab), and projects of over 150 students who were enrolled in CS357 for two semesters
- Answered students' questions on the Piazza website

Irwin Academic Services Center (University of Illinois), *Tutor*, Champaign, IL   **September 2011- May 2012**
- Tutored for the Division of Intercollegiate Athletics in CHEM, CS, STAT, and PHYS courses
- Helped improve student-athlete's performance in the classroom by teaching them efficient ways of learning materials in class and preparing for exams

RESEARCH AND PROJECT EXPERIENCE

Text Information Systems Project - ReviewsHub, University of Illinois, Champaign, IL   **Spring 2014**
- A review Analyzer for Best Buy Reviews. It has a following three functions:
- Search Engine: Search in all the reviews about product properties that users queried
- Compare Visualization: Search and visualize comparison patterns in reviews
- Summarizer: Summarize long reviews to a few sentences

Programming Studio Assignments Portfolio, University of Illinois, Champaign, IL   **Fall 2013**
- SVN code viewer with Comment Filter System (Link: http://web.engr.illinois.edu/~zhang349/Portfolio)
- All Java codes for a Chess Library and Python codes for a CSAir Flight System can be shown with jQuery slide down effects

Department of Computer Science, *Research Student*, University of Illinois, Champaign, IL   **August 2012 – August 2013**
- A scientific computing project about Topology of Relations; read papers about Topological Data Analysis in sports
- Did data analysis and integration by writing scripts in Python and plotting graphs with Matplotlib and Numpy packages

Yummy! Web-app, University of Illinois, Champaign, IL   **Spring 2013**
- This is an IM-like web application based on Google App Engine. It provides a place for people to discuss where to eat with others in a specific group. (Link: http://yummy-webapp.appspot.com)

Web Programming Course Project, University of Illinois, Champaign, IL   **Spring 2013**
- A Client-side TodoList that is based on HTML5 Local Storage
- The functions include adding/removing list items, supporting multiple lists with names, marking list items as done, deleting all don items in a list, lists persist between browser sessions, animations on main actions, and sorting items by deadlines

Statistical Computing Course Project, University of Illinois, Champaign, IL   **Spring 2013**
- Analyzed a breast cancer dataset to find genetic markers by using Principal Component Analysis.

Personal Website, University of Illinois, Champaign, IL   **Winter 2012**
- Wrote in HTML5, CSS, jQuery, JavaScript and with 960 Grid System, Google Chart Tools, Leaflet library
- Contain my recent accomplished projects (Link: http://web.engr.illinois.edu/~zhang349/old)

Applied Regression and Design Course Project, University of Illinois, Champaign, IL   **Fall 2012**
- Explored the "Titanic Disaster Data" on *Kaggle.com* about the factors that affect a passenger's survival
- Fitted several Logistic Regression models, Tree models and Random Forest model, and did predictions in R

Time Series Analysis Course Project, University of Illinois, Champaign, IL   **Fall 2012**
- Fitted a forecasting SARIMA model for the monthly industry sales of printing and writing papers (1963-1972) in R

Database Systems Course Project, University of Illinois, Champaign, IL   **Spring 2012**
- Created a website that offers campus-based book exchange service with LAMP package
- Worked on MySQL database and Ranking System in the aspects of manipulating experiential matrix

LEADERSHIP AND ACTIVITIES

Illini Statistics Club, *Webmaster*, Champaign, IL   **May 2013 – Present**
- Create electronic signup sheets with HTML5, PHP, MySQL to store members' information in an efficient way
- Create and manage the club's website: get more and more undergraduate/graduate students of Statistics major, Stat&CS major involved in career events, club social events, mentor/peer advisor programs, and company tech talks
- (Link: http://publish.illinois.edu/illinistatistics)

Women in Computer Science, *Active Member*, Champaign, IL   **September 2010- Present**
- Actively take part in general meetings, tech talks and networking events

Society of Asian Scientists and Engineers, *Outreach Chair*, Champaign, IL   **September 2010 – May 2012**
- Helped plan volunteer events for SASE to promote science and engineering in the local community
- Took charge of the Engineer in the Classroom (EITC) Program for 2011

Silicon Valley Entrepreneurship Workshop, *Attendee,* Silicon Valley, CA   **January 2012**
- Selected as one of the 25 students to a one-week Silicon Valley Entrepreneurship Workshop and visit several start-ups
- Interacted with corporate leaders to study technology commercialization and new venture creation
- Understood the prevailing trends of Big Data technology

TECHNICAL SKILLS AND QUALIFICATIONS

- **Computer Languages:** Java, Python, C/C++; R, Matlab, SAS; SQL, HTML5, CSS, JavaScript, jQuery; Ocaml
- **Other:** Hadoop, HIVE, MapReduce; Tableau, Weka; Github, Agile Software Development; Maven
- **Languages Spoken:** English, Mandarin Chinese, French

HONORS AND CERTIFICATIONS

- **2014 Grace Hopper Celebration Full Sponsorship from Bazaarvoice Inc.**   **Summer 2014**
- **Graduated with Departmental Honor: Distinction STAT/CS**   **Spring 2014**
- **2013 Grace Hopper Celebration Scholarship from UIUC CS department**   **Spring 2013**
- **University of Illinois Dean's List**   **Fall 2010, Spring 2012**
- **SAS Certified Base/Advanced Programmer for SAS 9**   **Spring/Summer 2012**
- Certifications of Accomplishment for Exploratory Data Analysis on coursera.com   **Summer 2014**
- Certifications of Accomplishment for Reproducible Research on coursera.com   **Summer 2014**

- Certifications of Accomplishment for Statistical Inference on <u>coursera.com</u> **Summer 2014**
- Certifications of Accomplishment for R Programming on <u>coursera.com</u> **Spring 2014**
- Certifications of Accomplishment for Getting and Cleaning Data on <u>coursera.com</u> **Spring 2014**
- Certifications of Accomplishment for Data Scientist Toolbox on <u>coursera.com</u> **Spring 2014**
- Certifications of Accomplishment for Computing for Data Analysis on <u>coursera.com</u> **Winter 2012**
- Certifications of Accomplishment for Machine Learning on <u>coursera.com</u> **Fall 2012**