Xiaodan (Sally) Zhang

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EDUCATION

University of Illinois at Urbana-Champaign   **Urbana-Champaign, IL**
- Major: Computer Science   **Master of Science,** December 2015
- 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

Apple, Inc., *Software Engineer*, Cupertino, CA   **February 2016 – Present**
- I work for Apple. I write codes.

Department of Computer Science, *Teaching Assistant*, University of Illinois, Champaign, IL   **August 2015 – December 2015**
- TA for an Intro to Computer Science course for non-engineering majors which covers HTML/CSS/JS, Excel and d3.js
- Lead 2 labs and hold office hours every week to help students who have questions regarding the course materials

Groupon, Inc., *Software Engineering Intern*, Palo Alto, CA   **June 2015 – August 2015**
- Worked on the Fraud Prevention engineering team to drive the strategy for building the backend infrastructure of the anti-fraud platform across all of Groupon using Ruby on Rails and RSpec
- Worked on fraud data analysis to evaluate two models for classifying Groupon Local purchases as fraud/non-fraud using various kinds of ETL frameworks and tools including Splunk, Hadoop, Teradata, Accertify, Python/Bash/SQL, etc.
- Worked on a GeekOn Hackathon project, AL, an experience package recommendation system built with AngularJS, Jetty web socket and Knapsack approximation algorithm

Packt Publishing, Inc., *Technical Reviewer*, Remote   **February 2015 – May 2015**
- Used my expertise in Tableau to shape the development of the book "Tableau Data Visualization Cookbook"
- Provided technical reviews for the book based on its designs, structures and contents

Department of Computer Science, *Teaching Assistant*, University of Illinois, Champaign, IL   **August 2014 – May 2015**
- Helped monitor student teams and their progress in Senior Project I (CS 492) and II (CS493) class
- Met with teams regularly to talk about their technical designs, plans and software development process

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

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

RESEARCH AND PROJECT EXPERIENCE

StrongTaco - A Yelp Image Classification Framework, University of Illinois, Champaign, IL   **Spring 2015**
- An image classification framework that recognizes whether a photo taken by a Yelp user is food or non-food
- Applied and compared two data classification methods: Color Histogram and Bag of Words with SIFT as Visual Words

FlavorSharer – HackIllinois 2015 project, University of Illinois, Champaign, IL   **Spring 2015**
- A cool web app that lets people know trending flavors of restaurants around and share their opinions about them with others
- A great data science project that consists data analysis, visualization and food science (Link: http://flavorsavor.cloudapp.net/)

DishRank - Automatic Extraction and Ranking of Menu Items, University of Illinois, Champaign, IL   **Fall 2014**
- Created a framework for extracting candidate dishes, ranking and visualizing the most popular dishes in a restaurant
- Three steps: Candidate dish extraction, Candidate dish filtering with reference models, Ranking dishes by rating and novelty
- Utilized Phrase Mining technique, NLP noun-phrase extraction algorithm and smoothed background language model

Social Visualization Project - PortraitOfStrongMan, University of Illinois, Champaign, IL   **Fall 2014**
- Data Visualization for training and competition data of Powerlifting and Strongman from 2012 to 2014
- Created quantified-selfie line charts, bubble charts and comparison line charts for comparing the Bench Press, Squat and Deadlift training data of multiple trainers using Python, Highcharts JS and D3.js

Social Visualization Project – AccentDiff, University of Illinois, Champaign, IL   **Fall 2014**
- Data Visualization for comparing the accent of different countries including both native and non-native English speakers
- Web crawled data using Scrapy framework, edited and transformed audio data using FFMPEG and AudioWaveform, and D3.js for visualizing the data

Social Visualization Project – TemporalPoliMap, University of Illinois, Champaign, IL   **Fall 2014**
- Data Visualization for exploring events happened between politically significant countries during specific time periods
- Used Google BigQuery for querying and extracting data from the GDELT database, and D3.js for visualizing the data

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**
- 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 (Link: http://web.engr.illinois.edu/~zhang349/TODO-List/)
- The functions include adding/removing list items, supporting multiple lists with names, marking list items as done, deleting all done items in a list, lists persist between browser sessions, animations on main actions, and sorting items by deadlines

LEADERSHIP AND ACTIVITIES

2015 Grace Hopper Celebration, *Student Opportunity Lab Presenter*, Houston, TX   **October 2015**
- Will present for the topic "Build an Interactive Data Science Project with Shiny-R"

2014 Grace Hopper Celebration, *Student Opportunity Lab Presenter*, Phoenix, AZ   **October 2014**
- Presented with Shivani Rao (Box Inc.) for the topic "From Classroom to Industry – Learning to be a Data Scientist"

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

Illini Statistics Club, *Webmaster*, Champaign, IL   **May 2013 – May 2014**
- 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

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

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

HONORS AND CERTIFICATIONS
- 2015 Grace Hopper Celebration Scholar from Anita Borg Institute   **Summer 2015**
- 2015 ABI Systers Google I/O Travel awards   **Spring 2015**
- Certifications of Accomplishment for all classes in the Data Science specialization on coursera.com   **Spring 2015**
- 2014 Fall Conference Travel Grant from UIUC CS department   **Fall 2014**
- 2014 Grace Hopper Celebration 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**