JESSICA CHENYANG XU

jcxu@berkeley.edu (614) 571- 0379

EDUCATION

University of California, Berkeley (Class of Spring 2017) - Bachelor of the Arts, Applied Mathematics

EXPERIENCE

Mapping the Intersection Data Analysis Project (Fall 2015)

- Analyzing large amounts of data and responses from a survey about self identification of race and ethnicity.
- Focusing on using multiple analytical tools such as R and Python to perform natural language processing and machine learning techniques to text entries of the survey to identify clusters within the responses.
- Summarizing free text fields to identify common responses and natural groupings.

Student Web Developer at Berkeley School of Law (Summer 2015)

- Developed a web application using Flask and Django to display data to users incorporating D3.js visualizations.
- Using multiple APIs such as the Yelp API to generate mock data to represent the Law School alumni and the GoogleMaps API to use its distance and latitude/longitude functionality to create data visualizations of current locations, connections, and interactions of graduates within the web application using D3.js.

BIDS/D-Lab Sensor Group Project & BigBang Project (Spring 2015)

- Explored the connection between hardware and software by using various sensors with Arduinos that processed data through a network of servers to eventually display the data to web users using D3.js.
- Worked with Python and the GitHub API to create an issue tracker and comment tracker used to visualize interactions of the contributors to various repos on GitHub.
- Analyzed and visualized social interactions of contributors on GitHub in various ways by creating force diagrams depicting who contributed to what files and what repos within an organization.

PROJECTS

Alumni Data Web Application (Summer 2015):

- Created a Django application that displays the locations and information of all alumni in a database on an interactive map using D3.js and Javascript.
- Implemented a simple web form in which users may find those alumni that are located around the area they live.

D3.js Data Visualizations of GitHub Organization Interactions (Summer 2015):

- Worked with various layouts of D3 such as the pack, bubble, and tree layouts, to find patterns and clusters among data extracted from the GitHub API from observing labels, comments, and issues.
- Analyzed interactions between contributors to a GitHub repo by examining relations between files and repos among all contributors for various organizations using interactive data visualizations.

COURSES

CS 61B: Data Structures
STAT 135: Concepts of Statistics
CS 170: Efficient Algorithms
CS 188: Artificial Intelligence
CS 61C: Machine Structures
MATH 113: Abstract Algebra
MATH 110: Linear Algebra
MATH 128A: Numerical Analysis