# **Janine Heiser**

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#### PROFESSIONAL SUMMARY

I'm a data analyst, developer, and recent graduate of the UC Berkeley School of Information's Master of Information Management and Systems program. Originally a self-taught programmer, I had the opportunity to go back to school and learn best practices for data management and user experience design. My work and educational experiences have taught me that good information organization complements usability. I'm seeking to work in a collaborative work environment; I love to share ideas, learn from others and be part of a team.

#### PROFESSIONAL EXPERIENCE

Full-Stack Software Engineer, Bancroft Library, Summer 2014 and Spring 2015, UC Berkeley

- Created a fully functional, Ruby on Rails web application that utilized a variety of existing natural language processing
  algorithms and libraries; the web application enables researchers and archivists to extract meaningful semantic topics and
  named entities from a given digital archival collection.
- Awarded a Bancroft Digital Archive Fellowship in Spring of 2015 to further develop the project that was started during the Summer of 2014.

Systems Administrator, July 2013-December 2014, UC Berkeley School of Law, Statewide Database Project

- Administered the Statewide Database's web servers; tasks included administering dev/QA/production websites, database systems, managing user accounts and file systems.
- Wrote and administered automated scripts that ensured the integrity and availability of Statewide Database's datasets to the public and other stakeholders.

Quality Assurance Engineer, December 2012-September 2013, INgrooves Fontana, San Francisco, CA

- Created and implemented automated testing software written python to test new accounting software features and functionality; identified, isolated, logged and tracked software defects, bugs and errors and added to test case libraries.
- Optimized SQL queries that queried application database tables as required; tables contained up to 324 million records of transactional data.

Data Analyst, August 2007-November 2012, Democratic National Committee, Technology Department, National Voter Database Project, Washington, DC and San Francisco, CA

- Helped develop and maintain the data infrastructure and provided quality assurance for the Democratic Party's online voter data management tool, Voter Activation Network (VAN), used by the Obama For America Campaign, and democratic candidates to organize and mobilize voters. (http://www.ngpvan.com/smartvan)
- Assisted in developing and maintaining Java-based ETL database tools and processes to cleanse, standardize and manage several terabytes of data from public and private sources about voters and voting districts.
- Planned, designed, and developed automated scripts, stored procedures, and database queries for auditing voter data for quality assurance.

## **ACADEMIC PROJECTS**

Master's Thesis: Whirld

Designed and built a web platform for collaborating on drone and aerial imagery projects. Whirld enables users to create collaborative maps from aerial photographs and combine these maps with other photos and data from ground.

Data Analysis and Visualization: An Examination of Railroad and Pipeline Oil Spills, 2005-2014

Used kernel density estimation and other spacial analysis techniques to visualize and compare the frequency of railroad and pipeline oil spills in the United States.

Interaction Design: Meeglo

Worked on a team to develop a tangible device that promotes calm and reduces stress. Meeglo senses a user's heart rate and glows as it changes, making the user conscious of his or her breathing.

Data Management and Organization: TubesTrends Created an ETL tool that collected and scraped data from a variety of social networks; this data was used to gain insights about trending topics on the web.

## **EDUCATION**

UC Berkeley, Berkeley, CA, Master of Information Management and Systems, May 2015

 focus areas: data analysis, information visualization and organization, user-centered interaction design

Oberlin College, Oberlin, OH, BA with high honors; Politics, Religion, 2007

### **TECHNICAL SKILLS**

Programming: python, ruby, bash scripting

Web: ruby on rails, javascript, html+css, jQuery+ajax, angular.js, node.js, PHP, sinatra, nginx and apache web server administration

*DBMS*: highly skilled in database design, administration and query optimization; familiarity with mapreduce concepts and nosql dbs like mongodb and sparkdb

Data Analysis and Visualization: D3, HighCharts, tableau, R, scipy