# Sean Lobo

17031 Coyote Bush Dr. San Diego, CA 92127 708-287-7702 (Mobile) sean.lobo@berkeley.edu github.com/seanlobo

## **Education**

#### University of California, Berkeley

Aug 2015 - Present

- Regents and Chancellor's Scholar
- · Pursuing a B.S. in Electrical Engineering and Computer Science
- Expected graduation May 2019

# **Projects**

### Facebook Message Mining (Personal project)

Dec 2015 - Present

A data analysis and visualization of individual's Facebook messaging history:

- Parse and analyze aggregate Facebook message data, with queryable data such as word frequencies, regex searching of conversations, and emoji analysis as examples
- Elegantly visualize user data on a web browser, with personalized graphs and charts
- · Generate beautiful and customizable word clouds for Facebook conversations

<u>Technologies used:</u> Python (*BeautifulSoup, Flask + Jinja, Colorama*), Java (*Kumo*), Javascript (*HighCharts, jQuery*), CSS (*Bootstrap*) || <u>github.com/seanlobo/fb-msg-mining</u>

#### Bear Maps (Course Project)

Mar 2016 - April 2016

A browser based maps service for the surrounding UC Berkeley area:

- Efficiently raster images of the surrounding Berkeley area as maps, utilizing efficient data structures such as QuadTrees, HashSets and Priority Queues
- Utilize OSM data to construct a graph of paths for the Berkeley Area
- Implement an A\* algorithm to calculated the shortest path between any two locations Technologies used: Maven, Java, OSM Data

#### Editor (Course Project)

Feb 2016 - Mar 2016

A cross platform minimalist text editor:

- · Utilize efficient data structures for constant time character insertion and deletion
- A feature set including arrow key and cursor movement, opening and saving of files Technologies used: Java (JavaFX)

# **Work Experience**

### J. Craig Venter Institute

June 2014 - Aug 2014

- Designed curricula for high school students in the field of Computational Biology
- Implemented solutions to the Longest Common Substring and Subsequence problems as intermediate steps to a DNA alignment algorithm

### Research

#### L.B. Stanza Development

Sep 2015 - Present

- Worked with UC Berkeley Graduate Patrick Li to develop the new functional programming language L.B. Stanza
- Wrote benchmarks and provided feedback on developer documentation
- Collaborated in creation of language's website: lbstanza.org

# Technical skills

**Languages/ technologies:** Java (experienced), Python (experienced), JavaScript (working knowledge), HTML/ CSS (working knowledge), SQL (prior experience)