Sean Lobo

708-287-7702 (Mobile) sean.lobo@berkeley.edu github.com/seanlobo

Education

University of California, Berkeley - GPA: 3.883

Aug 2015 - May 2019

• Intended B.S. in Electrical Engineering and Computer Science

Technical Skills

Languages/ technologies: <u>Java</u> (experienced), <u>Python</u> (experienced), <u>JavaScript</u> (working knowledge), C (working knowledge), HTML/ CSS (working knowledge), SQL (prior experience)

Relevant Coursework: <u>CS61B</u> (Data Structures), <u>CS61C</u> (Computer Architecture), <u>CS188</u> (Artificial Intelligence), CS70 (Discrete Math and Probability Theory)

Projects

Facebook Message Mining (Personal project)

Dec 2015 - Present

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

- Parsed and analyzed aggregate Facebook messager data, with queryable data such as word frequencies, regex searching of conversations, and emoji analysis
- Visualized user data on a web browser, with personalized graphs and charts
- Generated beautiful and customizable word clouds for Facebook conversations

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

Bear Maps (Course Project)

Mar 2016 - April 2016

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

- Efficiently rastered images of the surrounding Berkeley area as maps, utilizing efficient data structures such as QuadTrees, HashSets and Priority Queues
- Utilized OSM data to construct a graph of paths for the Berkeley Area
- Implemented an A* algorithm to calculate 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:

- Utilized 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

Course Tutor: CS61A

Aug 2016 - Present

- Hold office hours and small group tutoring for struggling students
- Collaborate with course staff to effectively teach, run and manage intro class of over 1,600

J. Craig Venter Institute - Summer Informatics Intern

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 Programming Language Development

Sep 2015 - Jun 2016

- Wrote benchmarks and provided feedback on developer documentation
- Collaborated in creation of language's website: lbstanza.org