



bren-a.github.io

Contact Information

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Address

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Programming Languages

- Python
- C/C++
- HTML/CSS
- Java
- Lisp
- Haskell
- OCaml
- Prolog

Skills

- Bash Scripting
- UNIX/LINUX
- LaTeX
- MS Office

Languages

- English
- Tagalog
- French

Brendan Alger

Student

Education

University of California, Los Angeles: June 2019

Computer Science and Linguistics

Experience

April 2017 - present: *Programming Intern*

Megamadz Mobile Advertising

Job Details:

- Aided company in transitioning to a digital medium.
 - Implemented a fax to email converter in Javascript using Twilio and Sendgrid API.
 - Doing so decreased the amount of physical documents, increasing company organization and productivity.
 - Digitization cut down on material expenses, decreasing overall cost of operation.

Jun 2017 - present: *UCLA Recreation*

Head Lifeguard, Apr 2018 - present; *Lifeguard*, Jun 2017 - Apr 2018

Job Details:

- Develop and lead employee training exercises once a month.
- Work in small groups during high pressure situations.
- Assess situational risk and manage it accordingly.
- Mediate disputes and listen to the concerns of patrons and staff.
- Observe hundreds of people concurrently and proactively scanning the environment to ensure everyone's safety.

Projects

2019, *Reddit Bot*

Created a bot for social media site Reddit.

Project Details:

- Discovered that Reddit has no simple way to follow posts about a specific topic.
- Solved this problem by creating a program in Python using Reddit's API
 - The API allows easy interaction and data manipulation of Reddit's website.
 - User gives bot a list of subreddits and key words that they want to track.
 - Bot will periodically call the Reddit API and collect data from the given subreddits.
 - Python then parses and filters the data based on the keywords.
 - Bot will then send a message to the user notifying them of the posts.

2018, *Ceasar Cipher*

Designed a program in C++ that can crack a Ceasar Cipher.

Project Details:

- Finds isomorphs using a Dictionary list.
- Saves matches into a hash map to that uses a dynamically allocated array of node pointers to a binary search tree.
 - Shortened insertion and search to $O(1)$ in most cases using a hash map.
 - Uses a binary search tree instead of a linked list to speed up search to $O(\log N)$