# Jeremy Euchi

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Website://https://jeuchi.github.io/personal-website/

LinkedIn:// jeuchi

## **EDUCATION**

University of California, Santa Cruz

Santa Cruz, CA

June 2021

Bachelor of Science, Computer Science; GPA: 3.89 / 4.0

San Bruno, CA

Skyline College

Computer Science Prospect; GPA: 3.68 / 4.0

May 2019

## Programming Skills

• C / C++ / C#

• ReactJS / Vue.js

• Python, py4web

• Java

• HTML5 / CSS3

• Swift, Google Firebase

• JavaScript

• Unity 2D Engine

• Git, Linux, Vim

## Projects

C Language

#### HTTP Server and Load Balancer

Computer Science and Engineering 130 Spring 2020

• Multi-threading + sockets: I converted my single threaded HTTP server that handles GET, HEAD, and PUT requests to handle concurrent requests by using the pthread library and with mutex locks. Another requirement was to log each request sent by a client to a file if the user specifies one. Logging means to output the file's content from the request to a log file. The load balancer seperately takes the port number of each multi-threaded server running and does a health check every X seconds or R requests. The client only communicates with the load balancer and the load balancer redirects to a healthy server. This uses multi-threading again and socket programming to set up client and server connections on each port.

## Note taking website

Computer Science and Engineering 183

Python(py4web), Vue.js, HTML

Spring 2020

• Full stack web page development: I used py4web to handle the back-end development by creating a database for each note uploaded to the server. Each user will have their own authenticated account for their personal notes. The JavaScript will handle the notes being presented on the page. With HTML conditional rendering, the JavaScript will be able to do GET and POST requests to the server with updated information as the user creates or updates their notes. Each note is ordered by last modified and starred notes will be at the top. The user is also able to change the color of each note and delete (with confirmation) each note. I learned about back-end and front-end development and how each part can communicate with each other

#### Simulation using ADT's

Computer Science and Engineering 15 / 15L Fall 2019

C Language

o IntegerQueue and Job ADT: Simulate set of jobs performed by a set of processors. Think of shoppers at a grocery store waiting in line at check-out stands. A job is a basket of goods to be purchased and a processor is a clerk at a check-out stand ringing up the purchase. Use the data to find the number of processors that is the most efficient for time and processing. Increased understanding of manipulating data and using multiple data structures

## Shakespeare

Computer Science and Engineering 101

C++ Language

Winter 2019

o Linked List ADT: Parsed all of Shakespeare's words, used in his works, into an array of Linked Lists. Read an input file to find the 'x' length word that is the 'y' most frequent. For example, [10 0] would mean the most frequent 10 letter word. Output results to a file. Increased proficiency in I/O, linked lists, and sorting data inside those lists.

## Six Degrees of Kevin Bacon

C++ Language

o Graphs: Take an input of movies with actors who starred in that movie, line by line. Create adjacency lists of actors who shared the same movie with that actor, with the weight as the movie. Find the shortest path using Breadth-first search between two actors and print with the movie those actors shared together. I learned about graph searching algorithms and about shortest path computations

## Battleship game

Computer and Information Science 255

Computer Science and Engineering 101

Java Language

Spring 2019

o 2D Arrays: Write an interactive, text-based program that allows the user to play a one-player simplified Battleship game. The user can type a location on a 2D array and the game checks if a ship that has been randomly assigned was hit. I increased knowledge in multi-dimensional arrays and user friendly design

## EXPERIENCE

Walgreens Burlingame, CA Sales Associate

Sep 2017 - Dec 2017

- Mentored new sales associates to contribute to the store's positive culture.
- Provide customers with exceptional care.

# County of San Mateo

Burlingame, CA

Election Officer

1 Day Contract; Nov 2016

- Located voters address and process them through the list.
- Worked on the voting machines and filing forms. For the day, about 500 voters helped.