# STEVEN TAN

1481 Shaffer Dr, San Jose, CA | San Francisco Bay Area tan.steven.97@gmail.com | (408) 896-5533 stevenistan.github.io

## **EDUCATION** University of California, Berkeley

May 2019 (expected)

B.A. Computer Science (3.41 GPA)
Relevant courses (\* in progress):

• Structure and Interpretation of Computer Programs, Data Structures, Great Ideas for Computer Architecture, Ruby on Rails, Efficient Algorithms and Intractable Problems\*, Artificial Intelligence\*

TECHNICAL

Languages: Java, Python, C, MIPS, Scheme, SQLite, HTML/CSS

**SKILLS** *Frameworks:* Ruby on Rails *Project Workflow:* Git

Operating Systems: Windows, Linux, Mac OS X

**PROJECTS** 

## Caldine (Ruby on Rails)

November 2016 – present

**Personal Project:** https://github.com/stevenistan/caldine

- Collaborated in a team of four to design a social web application connecting UC Berkeley students to eat together at the dinning commons
- $\cdot \ \, \text{Worked on users model, view, and controller to ensure proper interactions with the user's profile page}$
- · Implemented the carrierwave gem to allow users to upload a photo of themselves

Pacman (Python) February 2017

Course Project: Artificial Intelligence

- Implemented various search algorithms (DFS, BFS, UFC, A\*) and heuristics for a Pacman agent to complete unique maze levels (eat all the food, prioritize corners, etc.)
- · Created agents with minimax and expectimax searching to work in a multi-agent environment

## MIPS CPU (C, MIPS, Logisim)

November 2016

Course Project: Great Ideas for Computer Architecture

• Built a two-pass assembler for a subset of the 32-bit MIPS instruction set and the corresponding processor circuit that can perform simple operations and read from/write to memory

Text Editor (Java) March 2016

Course Project: Data Structures

- Developed from scratch a text editor with capabilities such as cursor clicking, open and save, scrolling, word wrapping, undo and redo, and window resizing
- · Worked with JavaFX for the graphical user interface (GUI)

### **EXPERIENCE**

### CS 61B Lab Assistant

August 2016 - present

UC Berkeley EECS Department

• Assisted students with their lab coursework by helping them understand computer science topics in Java (data structures, algorithms, etc.)

Externship January 2017

Cavium, San Jose, CA

• Shadowed engineers in the IC architecture team as well as the Design Verification team to further understand the chip design flow from the software design to hardware design stages

### **Lieutenant Governor**

April 2014 – March 2015

California-Nevada-Hawaii District, Key Club International

- · Served and oversaw Key Club members across San Jose, Milpitas, Fremont, and Union City
- Organized Bay Area-wide socials, fundraisers, and service events for over 800 members, conducted monthly division council meetings, and served on a district committee