# Alan Lam

#### aln.netlify.com

## Education

#### University of California, San Diego

B.S. in Mathematics - Computer Science

Minor in Mathematics Education

Expected Graduation: Dec. 2019

GPA: 3.467/4.0

### Awards

Provost Honors

### Skills

- Java (incl. Android)
- HTML/CSS
- Swift
- Python
- C
- C++
- JavaScript
- Git
- Linux

### github.com/alan-lam

#### <u>linkedin.com/in/ntrllog</u>

### Experience

#### Instructor Aide @Program Your Future

Jan. 2019 - Present

Assisting high school students with debugging iOS apps

#### Teaching Apprentice @Kearny High School

Jan. 2019 - Jun. 2019

- Assisted high school students in Integrated Math 3
- Lead classroom instruction with teacher present in classroom
- Worked one-on-one with students to help them apply what they learn in the classroom to solve in-class and homework problems

#### Math Tutor, Volunteer @Morse High School

Oct. 2018 - Dec. 2018

- Assisted high school students in Power Up Math 1, an elective support course taken in concurrence with Integrated Math 1
- Worked one-on-one with students to help them use their prior knowledge to solve problems and recognize patterns

#### Computer Science Mentor, Intern @ThoughtSTEM

Jun. 2018 - Aug. 2018

- Assisted middle and high school students with creating projects using various programming technologies (Racket, virtual reality, Python, HTML,
- Collaborated with ~30 developers on Morugamu, a programming language packaged as a board game
- Generated plots for data visualization of board games on Kickstarter to compare money asked for vs. money received

(more at <a href="mailto:aln.netlify.com/projects">aln.netlify.com/projects</a>)

### **Projects**

#### Web Dev For Beginners [HTML/CSS]

### <u>Link</u> Intro to CS Tutorials [HTML/CSS]

Link

- A learning resource website
- Wrote tutorials introducing basic HTML and CSS to beginners
- A series of interactive tutorials for programming
- Wrote exercises (in Java, Python, C, C++) to introduce basic programming concepts to beginners

#### Poker [Java]

#### Github Link Bagels [Java/Android]

Github Link

- A terminal-based text game
- Designed gameflow for playing against a computer
- Successfully created functions to rank poker hands
- An Android app of a numbers-deduction game
- Designed the layout of each activity and implemented functionality for generating hints, displaying to screen, and saving notes

#### Notification Reminder [Java/Android]

#### Github Link CopyText [Java/Android]

<u>Github Link</u>

- An Android app that creates reminders in the form of notifications
- Implemented functionality for creating, loading, and deleting notifications
- An Android app that is a clipboard manager
- Used SharedPreferences to save/load strings of text and copy to the clipboard

#### Notepad [Java/Android]

#### Github Link Snake [Python] (Webroot Hackathon)

- An Android app of a simple text editor
- Implemented functionality for saving notes locally and locking notes with a password
- A multiplayer version of the snake game
- Created functions for snake to make smarter decisions against other players