# Alan Lam

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github.com/alan-lam

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### Education

#### University of California, San Diego

B.S. in Mathematics - Computer Science

Minor in Mathematics Education

Expected Graduation: December 2019

GPA: 3.4

### Extracurricular

### Eta Kappa Nu (HKN)

 Member of engineering honor society at UCSD

### Skills

- Java (incl. Android)
- HTML/CSS
- Python

- JavaScript
- Racket
- Swift
- Git

### Experience

### Instructor Aide @Program Your Future

January 2019 - Present

Assisting high school students with debugging iOS apps

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

January 2019 - Present

- Assisting high school students in Integrated Math 3
- Working 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

October 2018 - December 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

June 2018 - August 2018

- Assisted middle and high school students with creating projects using various programming technologies (Racket, virtual reality, Python, HTML, Java)
- 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

### Math Tutor, Volunteer @Lincoln High School

April 2018 - June 2018

- Assisted high school students in Integrated Math 2
- Worked one-on-one with students to help set-up and approach problems involving triangle congruence and similarity

### **Projects**

(more at alanlam.netlify.com/projects)

#### Web Dev For Beginners [HTML/CSS] webdevforbeginners.netlify.com Intro to CS Tutorials [HTML/CSS]

- A learning resource website using HTML and CSS
- Wrote tutorials to introduce basic elements of HTML and CSS to

alanlam.netlify.com/projects

- beginners

 Wrote exercises (in Java, Python, C, C++) to introduce basic programming concepts to beginners

### Poker [Java]

- A terminal-based text game
- Designed gameflow for playing against a computer
- Successfully created functions to rank poker hands

### Github Bagels [Java/Android]

Github

An Android app of a numbers-deduction game

A series of interactive tutorials for programming

 Designed the layout of each activity and implemented functionality for generating hints, displaying to screen, and saving notes

Used Shared Preferences to save/load strings of text and copy to

### Notification Reminder [Java/Android]

## notifications

and deleting notifications using Shared Preferences

### Github CopyText [Java/Android]

Github

- An Android app that creates reminders in the form of
- Successfully implemented functionality for creating, loading,

the clipboard

### Notepad [Java/Android]

- An Android app of a simple text editor
- Implemented functionality for saving notes to external storage and loading and deleting notes from external storage

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

A multiplayer version of the snake game

An Android app that is a clipboard manager

 Created functions for snake to make smarter decisions against other players