

# 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

## Extracurricular

*Eta Kappa Nu (HKN)*

- Member of engineering honor society at UCSD

## Skills

- HTML/CSS
- Java (incl. Android)
- Python
- C
- C++
- Racket
- Git

## Experience

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

September 2018 - Present

- Assisting high school students in Power Up Math 1, an elective support course taken in concurrence with Integrated Math 1
- Working 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 II
- Worked one-on-one with students to help set-up and approach problems involving triangle congruence and similarity

***Math Tutor, Volunteer @Preuss School***

April 2017 - June 2017

- Assisted high school students in Calculus
- Worked one-on-one with students to help set-up and approach problems involving integrals

## Projects

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

webdevforbeginners.netlify.com

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

**Intro to CS Tutorials**  
[HTML/CSS]

alanlam.netlify.com/tutorials

- A series of interactive tutorials for programming
- Wrote exercises (in Java, Python, C, C++) to introduce basic programming concepts to beginners

**Poker [Java]**

github.com/alan-lam/Poker

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

**Bagels [Java/Android]**

github.com/alan-lam/Bagels

- 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

**Snake [Python] (Webroot Hackathon)**

- A multiplayer version of the snake game
- Created functions for snake to make smarter decisions against other players

**Notepad [Java/Android]**

github.com/alan-lam/Notepad

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

**Client-Server Messaging [Java]**

github.com/alan-lam/Client-Server

- A terminal-based messaging application
- Implemented server and client connections with Java Sockets
- Successfully used threads to connect multiple clients and receive/send messages