



Education

December 2019

**B.S. Mathematics - Computer Science**, *UC San Diego*

Mathematics Education Minor

GPA: 3.4



Experience

January 2019 - Present

**Instructor Aide**, *Program Your Future*

I'm currently serving as an instructor aide for an iOS Programming course. I'm learning Swift and Xcode with high school students as the instructor presents the material. I help students debug their apps and verify that their apps are working.

January 2019 - Present

**Volunteer Math Tutor**, *Kearny High School*

I'm currently assisting the teacher in helping individual high school students with Integrated Math 3. Topics include PEMDAS, adding/subtracting/multiplying/dividing/factoring polynomials, writing equations of graphs, and exponential growth.

October 2018 - December 2018

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

I assisted the teacher in helping individual high school students solve problems in Power Up Math 1, an elective support course taken in concurrence with Integrated Math 1. Topics included PEMDAS, distance, and pattern recognition.

June 2018 - August 2018

**Computer Science Mentor**, *ThoughtSTEM*

I assisted the instructors in helping individual middle and high school students debug programs in Racket. I learned Racket along with the students while the instructors presented the material and answered questions students had. On weeks that I did not attend camps, I collaborated with ~30 developers on Morugamu, a programming language packaged as a board game. For marketing information, I and a partner used Racket to generate plots for data visualization of board games on Kickstarter to compare money asked for vs. money received.

April 2018 - June 2018

**Volunteer Math Tutor**, *Lincoln High School*

I assisted the teacher in helping individual high school students in Integrated Math 2. Topics included triangle congruence, triangle similarity, and proofs involving them.

April 2017 - June 2017

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

I assisted the teacher in helping individual high school students in Calculus. Topics included applying integral formulas.



Projects

(more at [alanlam.netlify.com/projects](https://alanlam.netlify.com/projects))

Fall 2018

**Intro to CS Tutorials**

I used JDoodle to create a series of interactive tutorials introducing programming in Java, Python, C, and C++. They're intended to familiarize beginners with basic concepts that are often used in programming.

Spring 2018

**Web Dev For Beginners**

For my Public Rhetoric and Practical Communication class, I created a learning resource introducing HTML & CSS. It's intended for beginners who have never used HTML & CSS to make websites before.