
Education

Dec. 2019

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

GPA: 3.42/4.0

Mathematics Education Minor

Experience

Jan. 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.

Jan. 2019 - Present

Teaching Apprentice, *Kearny High School*

I'm currently assisting the teacher in helping individual high school students with Integrated Math 3. I'm also leading classroom instruction with the teacher present in the classroom. Topics include PEMDAS, polynomials, writing equations of graphs, exponential growth, and trigonometry.

Oct. 2018 - Dec. 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.

Jun. 2018 - Aug. 2018

Computer Science Mentor, *ThoughtSTEM*

I assisted the instructors in helping middle and high school students debug programs in Racket. I learned Racket with the students while the instructors presented the material and answered student questions. 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.

Apr. 2018 - Jun. 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.

Apr. 2017 - Jun. 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)

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.