Alan Lam

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## Education

Sep. 2015 - Dec. 2019

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

GPA: 3.48

**Mathematics Education Minor** 

## Experience

Sep. 2019 - Present

Computer Science Instructor ThoughtSTEM

I'm leading after school programs designed to teach Racket to students in K-5th grade. I present challenges for students to complete and help students as needed.

Aug. 2019 - Sep. 2019

Computer Science Tutor UC San Diego

I served as a tutor for COGS 18, Introduction to Python. I worked one-on-one with students to guide them through labs and help them understand introductory programming concepts. I also designed final exam practice problems and helped design final exam problems.

Jul. 2019 - Aug. 2019

Computer Science Tutor, Self-Employed

I helped a student learn topics from an introductory computer science course taught in Java. I explained ideas from the student's lecture notes and guided the student in completing programming exercises.

Jul. 2019 - Aug. 2019

Computer Science Instructor, *ThoughtSTEM* 

I co-led a coding bootcamp designed to teach data science using Racket. I worked with students to help them construct their own solutions to coding challenges.

Jul. 2019 - Aug. 2019

Computer Science Tutor, UC San Diego

I served as a tutor for CSE 7, Introduction to Programming with Matlab. I worked one-on-one with students to guide them through labs and help them understand introductory programming concepts.

Jan. 2019 - Sep. 2019

Instructor Aide, UC San Diego Extension

I served as an instructor aide for iOS and Android Programming courses. I helped students debug their apps and verified that their apps were working.

Jan. 2019 - Jun. 2019

Teaching Apprentice, Kearny High School

I assisted the teacher in helping individual high school students with Integrated Math 3. I also led classroom instruction with the teacher present in the classroom. Topics include PEMDAS, polynomials, writing equations of graphs, exponential growth, trigonometry, and probability.

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.

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 aln.netlify.com/projects)

Fall 2018, Spring 2019

Numerical Analysis Learning Resource

I wrote an online mini-textbook using my notes from MATH 170A & 170B. It presents the material in a story-like manner. I wrote it with the intention of making math easy to read and follow.

Fall 2018 Intro to CS Tutorials

I created 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.