

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
- C
- C++
- JavaScript
- Swift
- Git
- Linux

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
- Leading classroom instruction with teacher present in classroom
- 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

Projects

(more at alanlam.netlify.com/projects)

Web Dev For Beginners [HTML/CSS]

Link

- A learning resource website
- Wrote tutorials introducing basic HTML and CSS to beginners

Intro to CS Tutorials [HTML/CSS]

Link

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

Poker [Java]

Github

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

Bagels [Java/Android]

Github

- 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

Notification Reminder [Java/Android]

Github

- An Android app that creates reminders in the form of notifications
- Implemented functionality for creating, loading, and deleting notifications using Shared Preferences

CopyText [Java/Android]

Github

- An Android app that is a clipboard manager
- Used Shared Preferences to save/load strings of text and copy to the clipboard

Notepad [Java/Android]

Github

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

Snake [Python] (Webroot Hackathon)

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