# Jason Keung

#### **Education**

#### University of California, Berkeley

August 2018 - May 2022

- B.A. in Computer Science and B.A. in Applied Math
- Relevant Coursework:
  - o CS 70 Discrete Math and Prob. (In Progress), CS 61B Data Structures (A), CS 61A (A-)
  - Math 54 Linear Algebra and Differential Equations (A), Math 53 Multivariable Calculus (A)

#### **International Baccalaureate Diploma**

**June 2018** 

• Higher Level Computer Science - 6 out of 7, Higher Level Mathematics - 7 out of 7

## **Projects**

#### Algebra Worksheet Generator - Java, Java Swing

- Desktop application to generate six-problem worksheets of one-variable equations
- Tracks student progress and adjusts the difficulty of problems generated accordingly

## Knight's Tour Algorithm Demonstration - Java, Java Swing

- Desktop application that uses an algorithm to complete the Knight's Tour in chess and shows a knight piece visiting all 64 squares of the board
- User is able to control moves per second, and the sequence of moves is shown in the chessboard.

#### Priority Queue Visualizer - Java, Java Swing

• Desktop application developed for a high school teacher to visually demonstrate adding/removing from a binary heap priority queue

## Personal Website (jasonkeung.github.io) - HTML/CSS, Materialize

• Showcases past projects and hosts links to LinkedIn, GitHub, resume, and email

#### Work Experience

## Academic Intern - CS 61A, CS 61B

January 2019 - Present

- Helped teach 20+ students object oriented programming, recursive problem solving, data structures and algorithms, and graph traversals in lab, office hours, and exam-prep sections
- CS 61A Spring '19, Summer '19, CS 61B Summer '19

## Taekwondo Instructor - World Martial Arts Center

November 2017 - June 2018

- Worked with 1-2 other instructors to teach Korean martial arts to 20+ children, young teens, and adults
- Developed instructor level leadership and teaching skills over 2 summer leadership programs

#### **Skills**

#### **Data Structures and Algorithms**

- Fluency in advanced data structures, space/time complexity analysis, and search algorithms over data structures and graphs
- Experience in problem solving, recursive thinking, tree recursion, object oriented programming

## **GUI Development**

• Experience with the Java Swing library, integrated high school CS command line assignments into graphical desktop applications

#### Java, Python, C++, HTML/CSS

## Linux Environments, Git Version Control, Martial Arts Instruction, Math Tutoring