# Jason Keung

# **Education**

#### University of California, Berkeley

August 2018 - Dec 2021

- B.A. in **Computer Science** and B.A. in **Applied Math**
- Relevant Coursework (**3.94** Major GPA):
  - o Algorithms, Machine Structures, Data Structures, Discrete Math and Prob. Theory, Linear Algebra, Multi. Calculus

#### **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

# Feedback Form (jasonkeung.me/feedback-form-frontend) - React.js, Bootstrap, HTML/CSS/Javascript

- Features form validation using regex and a live character counter controlled component, makes POST request to url
- Built to learn and improve React and front-end skills

#### 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

#### **Work Experience**

**Junior Mentor -** *Computer Science Mentors (csmentors.berkeley.edu)* 

September 2019 - Present

- Lead weekly sections of 4-6 students for CS 70, reteach core concepts, work through CSM worksheets
- Provide inclusive social/emotional support for my students, especially those underrepresented in CS at Berkeley

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

January 2019 - Present

- Help 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

- Work with 1-2 other instructors to teach Korean martial arts to 20+ children, young teens, and adults
- Develop 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, React.js/Bootstrap, and integrated high school CS command line assignments into graphical desktop applications

# Java, Python, C++, React.js, Bootstrap, HTML/CSS/Javascript

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