Jason Keung

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Education

University of California, Berkeley **August 2018 - Dec 2021**

- B.A. in **Computer Science** and B.A. in **Applied Math**
- Relevant Coursework:
    - Artificial Intelligence, Optimization Models, Algorithms, Data Structures, Discrete Math/Prob. Theory, Abstract Algebra, Linear Algebra, Multi. Calculus

International Baccalaureate Diploma **June 2018**

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

Work Experience

Amazon Software Engineering Intern - *Amazon.com Services* **June 2020 - August 2020**

Senior Mentor/Junior Mentor - *Computer Science Mentors (csmentors.berkeley.edu*) **September 2019 - Present**

- Host meetings and manage/advise junior mentors in teaching
- Lead weekly sections of 4-6 CS students, reteach core concepts, and work through CSM worksheets
- Provide inclusive social/emotional support for students, especially those underrepresented in CS at Berkeley

Academic Intern - *CS 61A, CS 61B* **January 2019 - September 2019**

- 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

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

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