JESSICA Z. HOU

SANTA CLARA, CA
503.980.5815
JHOU@SCU.EDU
JHOU.XYZ
JHOU45

Education

SANTA CLARA UNIVERSITY
B.S. in Computer Science
Robert Warren Scholar
Expected Jun 2021
GPA: 3.8/4.0

Coursework

Object-Oriented Programming
Data Structures
Discrete Mathematics
Computer Graphics

Technical Skills

LANGUAGES
C++ (Proficient)
Java (Intermediate)

TOOLS
HTML5/CSS3 (Intermediate)
Eclipse (Intermediate)

Languages

Mandarin Chinese (Proficient)

Activities

SANTA CLARA COMMUNITY ACTION PROGRAM
Volunteer, Nov 2017 - Feb 2018
- Tutored 20 elementary students in East San Jose through after-school enrichment program (CORAL)
- Enforced safety regulations to maintain positive learning environment

WOMEN IN STEM
Member, Sept 2017 – present
- Attended Q&A panels of women engineers to gain more insight into professional career experiences
- Fostered sense of community among members by attending club networking events

Interests

Aspiring Yelp Elite Squad Member, foodie, painting, sketching, tennis, traveling

Experience

CODE TO THE FUTURE
Instructor, May 2018 - Aug 2018
- Assigned to instruct younger technology-driven students through block-based coding video game design (Scratch) and Minecraft modding using Eclipse (Java)
- Conducted 6-hour classes of a total of ~40 students
- Improved students' knowledge of the debugging process, code organization & programming logic

STEM ACADEMY
Instructor, Mar 2014- Jun 2017
- Tasked to hone students' application of the scientific method through executions of natural science experiments
- Coordinated a team of 4 instructors in planning, organizing, and teaching lessons, experiments, and demonstrations for ~30 students
- Provided students with additional opportunity to explore STEM field outside of class

Projects

WORD SEARCH
May 2018
- Language: C++
- A word-searching algorithm to find all valid words with at least 5 letters in a given puzzle of any dimensions by comparing it to dictionary text file
- Learned to consider different cases when writing algorithm (horizontally, vertically, forwards, and backwards)

HANGMAN
Aug 2018
- Language: C++
- A text-based hangman game in which the answer is randomly selected from dictionary text file
- Acquired greater understanding of the functions, weaknesses, and strengths of different data structures

4-PUZZLE PROBLEM
Aug 2018
- Language: C++
- A simplified version of the 8-puzzle problem
- Practiced the implementation of directed graph and breadth-first search algorithm
- Algorithm outputs the shortest successive moves needed to solve the puzzle with the empty space ending on bottom right of the board

Leadership

AMERICAN RED CROSS
SW Washington Youth Council Member, Jun 2015 - Jun 2017
- Organized bi-annual blood drives, attracting ~200 donors annually, and annual coin drives for disaster relief and measles vaccinations
- Assisted in facilitating an annual leadership development conference for 50 high schoolers through the instruction of leadership classes and team-building exercises
- Increased high school Red Cross club membership by 50%