Amy Cu

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UNIVERSITY OF CALIFORNIA, DAVIS

Computer Science Major. B.S. | *expected December 2020* | **GPA 3.73**
Dean's Honors List, College of Letters and Science | *Winter '18* | *Fall '18*

RELEVANT COURSEWORK

- Data Structures
- Machine Dependent Programming
- Algorithm Design
- Computer Architecture
- Theory of Computation
- Programming Languages
- Graphic Design & Computer Technology

SKILLS

Programming Languages:
- Java, C++, C, C#, Python, Go, Lisp, Prolog, HTML, CSS

Operating Systems & Graphics:
- Unix, Adobe Illustrator, Adobe Photoshop

WORK & LEADERSHIP EXPERIENCE

Programming Languages & Software Engineering Research — Davis, CA | *August 2019 - present*
Undergraduate Research Student
- Research with team under Dr. Cindy Rubio Gonzalez for BugSwarm project to examine debugging and bug-searching efficiency and accuracy at the UC Davis College of Engineering
- Study and collect information from dataset of fail-pass pairs to develop test code for bug-searching

iD Tech Summer Camps — Livermore, CA | *July 2019 - August 2019*
2019 Summer Instructor
- Taught Java coding courses for class sizes of up to 10 high-school students. Covered Java coding fundamentals, Data Structures & Algorithms, and Game Development using Java and Processing (*Code Apps with Java, Java Coding and Game Development*)
- Taught Scratch coding and programming with Sphero BOLT Robots for elementary-school students (*Code-a-Bot: AI and Robotics with Sphero BOLT*)

UC Davis Computer Science Tutoring — Davis, CA | *April 2018 - present*
Computer Science Tutor
- Tutor for lower-division computer science courses. Help further students' understandings of key concepts and applications of topics in programming assignments
- Host Review Sessions to help students review concepts and prepare for midterms / exams

SELECTED PROJECTS

BugSwarm (Research Project)
- Examined debugging and bug searching efficiency and accuracy through mining and continuously growing a dataset of reproducible failures and fixes of fail-pass pairs

Game Design (Independent Projects)
- Designed and developed interactive Java Applet games using Java and Processing
  - **Fruit Field:** single-player token-collecting game spanning multiple levels where player avoids computer generated enemy AI and earns points for collecting tokens
  - **Dots:** interactive 2-player game with the objective of connecting the dots to make "boxes"

Personal Website (Independent Project)
- Designed and coded a personal website to feature projects and resume. Using HTML and CSS, is currently hosted on GitHub site