# **Emmaline Mai**

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#### Education

Carnegie Mellon University, Pittsburgh, PA | 2023

· Bachelor of Science, Computer Science

Lynbrook High School, San Jose, CA | 2019

### **Work Experience**

Teaching Assistant | Carnegie Mellon University 15-112 course | spring 2020

· Working with other course staff to teach recitations and review sessions, and grade papers

Assistant Instructor | Galileo Learning | summer 2019

· Worked with instructors to teach kids to create their own IOS apps and animation projects

Teaching Assistant | Digital Media Academy | summer 2018

· Worked with instructors to teach coding/Al concepts, robotics, animation, and electronics

## Leadership Experience

FIRST Robotics Competition | Mechanical & Animation Director | 2015-19

- · 2016-19 Regional Chairman's Award Winner, 2019 Regional Winner, 2017 Championships Subdivision Winner
- · Led a team to design and build an elevator and arms for the robot to climb onto a 19" tall platform

Elementary School Game Coding Club | Founder & President | 2017-19 Girls Who Code Club | Intern & Treasurer | 2015-19

Taught 100+ students each year to code with HTML/CSS and JavaScript

FIRST Lego League | Mentor | 2015-18

- · Mentored 4 teams; organized 2 scrimmages; volunteered at 5 tournaments
- · Helped create an instructional YouTube channel (STAMPS Learning) with 510k views

Girl Scouts | Senior Patrol Leader & Webmaster | 2012-19

#### Skills

Python (OpenCV), Java, SolidWorks, Android Studio, Autodesk Maya

## **Projects**

Square Jumper Platformer game | Term Project | 2019

- Uses OpenCV color detection, modified Dijkstra's algorithm for enemy AI, file I/O for leaderboards, parallax backgrounds CMU Personalized Dining Android app | Hackathon Project | 2019
- · Tracks GPS location, saves user preferences, generates an individualized list of possible dining locations

#### **Activities**

Roboclub | RobOrchestra Hardware & Software Team Member | 2019-present

- · Designing a robotically played ukulele
- · Using computer vision to detect tempo from human conducting; generating music using Markov chains

CMU Sweepstakes Buggy Team | Mechanic | 2019-present

· Help build new buggies and maintain past buggies for races

Tech Museum of Innovation | Volunteer Exhibit Interpreter | 2017-19

#### **Awards**

NCWIT Award for Aspirations in Computing National Honorable Mention & Affiliate Award | 2019 Girl Scouts Gold Award | 2018

· Combated lack of youth interest in STEM by founding a youth coding club