

# 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/AI 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 Jump 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