

# Emmaline Mai

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## Education

Carnegie Mellon University, Pittsburgh, PA | B.S. Computer Science 2023

- Relevant courses: Principles of Imperative Computation, Principles of Functional Programming, Introduction to Computer Systems, Concepts in Artificial Intelligence, Matrices and Linear Transformations

Lynbrook High School, San Jose, CA | 2019

## Work Experience

Teaching Assistant | Carnegie Mellon University | spring, summers 1&2 2020

- Worked with other 15-112: Fundamentals of Programming and Computer Science course staff to teach recitations, labs, and review sessions, hold office hours and hackathons, and mentor students through their term projects

Assistant Instructor | Galileo Learning | summer 2019

- Worked with instructors to teach kids to create their own iOS apps and 3D digital animation projects

Teaching Assistant | Digital Media Academy | summer 2018

- Worked with instructors to teach coding/AI concepts, robotics, digital animation, and electronics

## Leadership Experience & Activities

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

- Building a robotically played ukulele, generating music using Markov chains

CMU Sweepstakes Buggy Team | Shop Assistant | 2019-present

- Help build new buggies and maintain past buggies for races

TechNights | Session Co-Leader | 2020-present

- Co-leading creation of an educational video to teach middle school students about Turing Machines

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 mechanism for the robot to climb onto an elevated platform

Elementary School Game Coding Club | Founder & President | 2017-19

Girls Who Code Club | Treasurer | 2015-19

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

Tech Museum of Innovation | Volunteer Exhibit Interpreter | 2017-19 (130+ hrs)

## Skills

Python, C, SML, SolidWorks, Android Studio, Autodesk Maya

## Projects

ELM (Enrich, Learn, Motivate) Android app | Hackathon Project | 2020

- Manages a database and instantly connects tutees with tutors for any subject through a video call session
- Includes a feed where users can publicly post their progress

Square Jumper platformer game | Term Project | 2019

- Uses OpenCV color detection and modified Dijkstra's algorithm for enemy pathfinding

CMU Personalized Dining Android app | Hackathon Project | 2019

- Tracks GPS location and uses user preferences to generate a ranked list of recommended dining locations

## Awards

Carnegie Mellon University Dean's List | fall 2019

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