Emmaline Mai

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Education

- **Carnegie Mellon University, School of Computer Science, Pittsburgh, PA** 2023
  - Bachelor of Science, Computer Science
- **Lynbrook High School, San Jose, CA** 2019
- **COSMOS Computer Networking and Robotics Cluster at UC Santa Cruz** summer 2017
  - Programmed a state machine for a robot to navigate a maze with sensors

Work Experience

- **Assistant Instructor at Galileo Learning** *(45 hrs/wk)* summer 2019
  - Worked with instructors to teach kids to create their own IOS apps and animation projects
- **Teaching Assistant at Digital Media Academy** *(45 hrs/wk)* summer 2018
  - Worked with instructors to teach kids coding/AI concepts, robotics, animation, and electronics

Leadership Experience

- **FIRST Robotics Competition**- *Mechanical & Animation Director (1200+ hours)* 2015-19
  - 2016-2019 Regional Chairman's Award Winner, 2019 Regional Winner
  - Contributed to prototyping, CAD, fabrication, digital animations, programming
  - Designed/built an elevator & arms for the robot to climb onto a 19" tall platform
- **Elementary School Game Coding Club -** *Founder and President (4 hrs/wk)* 2017-19
  - Created curriculum and website; led meetings
- **Girls Who Code Club** - *Treasurer (4 hrs/wk)* 2015-19
  - Taught 100+ students each year to code with HTML/CSS and JavaScript
- **FIRST Lego League -** *Mentor (4 hrs/wk)* 2015-18
  - Mentored 4 teams; organized 2 scrimmages; volunteered at 5 tournaments
  - Helped created an instructional YouTube channel (STAMPS Learning) with 508k views
- **Girl Scouts -** *Senior Troop Leader, Senior Patrol Leader, Webmaster (2 hrs/wk)* 2012-19

Skills: Python, OpenCV-Python, Java, Solidworks, Android Studio, Autodesk Maya

Projects

- **Square Jump -** *Term Project* 2019
  - Platformer game that uses OpenCV-Python color detection for users to draw platforms, modified Dijkstra's algorithm for enemy AI, file I/O for leaderboards, and parallax background scrolling
- **CMU Personalized Dining App -** *Hackathon Project* 2019
  - Collaborated to create an Android app that continuously tracks GPS location and saves user preferences, then uses an algorithm to generate an individualized list of dining locations

Activities

- **RoboClub -** *RobOrchestra Hardware & Software Team Member* 2019-now
  - Designing a robotically played ukulele; using vision to detect the tempo from human conducting
- **CMU Sweepstakes Buggy Team** - *Mechanic* 2019-now
- **Tech Museum of Innovation** - *Volunteer Exhibit Interpreter (130+ hours)* 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