Audrey Cui

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https://audreycui.github.io/

EDUCATION

Massachusetts Institute of Technology   **Cambridge, MA**

2020 - 2024
- **Select Coursework:** Intro Algorithms (6.006), Intro Neuroscience (9.01), Intro Media Studies (CMS.100)
- **Advanced Standing Exams passed**: Intro CS & Programming (6.0001), Multivariable Calculus (18.02)
- **Activities:** TechX/THINK, MIT Bhangra, Harvard Chinatown Citizenship

Monta Vista High School   **Cupertino, CA**

2016 - 2020: **GPA 4.0 (unweighted)**
- **SAT**: 1590/1600, Math Level 2: 800, Physics: 800, Biology 800. **National AP Scholar:** 5/5 on 9 AP exams
- **Activities:** Biology Club President, Science Olympiad Vice President, Cross Country

RESEARCH

MIT CSAIL (Undergraduate Research Opportunities Program)   *Sep 2020 - present*

Painting Light and Style with a Generative Adversarial Network
- Working under the Torralba Lab to identify and manipulate neurons responsible for image lighting in order to improve understanding of and control over GANs

MIT THINK Scholars & Independent Research   *Jun 2018 - Jun 2019, Feb 2020*

From Pixel to Paragraph: A deep neural artwork analysis paragraph generator
- Developed a generative adversarial neural network for the generating paragraphs analyzing input artwork. Used Tensorflow to build complex machine learning models. Built augmented reality proof of concept using Unity.

SUNY Stony Brook   *Jun 2019 - Aug 2019*

Development of a hydrogel-based intumescent flame retardant for limiting wildfire propagation
- Synthesized and characterized a novel eco-friendly, sprayable, and effective fire retardant gel
- Presentation accepted by the American Chemical Society Spring 2020 National Meeting & Expo

WORK & COMMUNITY SERVICE

Hongyun Art School   **Cupertino, CA**

Art Teacher   *Jun 2017 - Mar 2020*
- Taught weekly intermediate art classes in a variety of media (color pencil, acrylic, watercolor, clay, pen and ink)
- Created & taught a curriculum for 6 day camp that teaches the science of light phenomena through watercolor

Face Shield Project   *Mar 2020 - Jun 2020*
- Built a network of 100 robotics teams, 3d printing hobbyists, and volunteer drivers to 3d print and deliver parts for 10,000 face shields in response to a nationwide PPE shortage
- Established partnership with Maker Nexus, a local nonprofit that delivered face shields to healthcare centers

Retirement Center Art Workshops   *Sep 2017 - Feb 2020*
- Created & led biweekly art workshops for senior residents at 3 local retirement centers
- Recruited and trained 35 team members to lead art workshops

SKILLS

Python, Java, R, Tensorflow, Pytorch, HTML/CSS, Unity/C#, Microsoft Azure, Adobe Illustrator

HONORS

2020 Society of Women Engineers Scholarship Recipient, **2020** Equitable Excellence Scholarship Recipient, **2020** Hearts in San Francisco Artist, **2019** MIT THINK Scholars Finalist & overall 2nd place winner, **2018 & 2019** USA Biology Olympiad Top 50, **2019** City of Cupertino Volunteer of the Year, **2018** AIME Qualifier, **2018** Cupertino Emerging Artist Award Winner