

GIRLS WHO CODE:

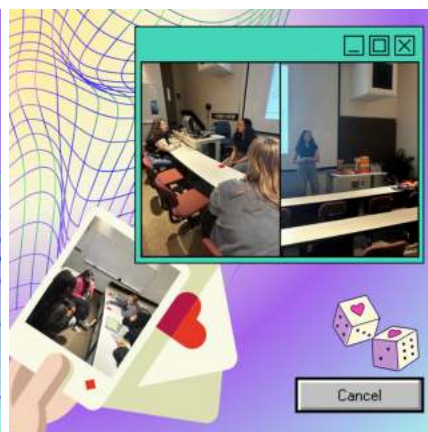
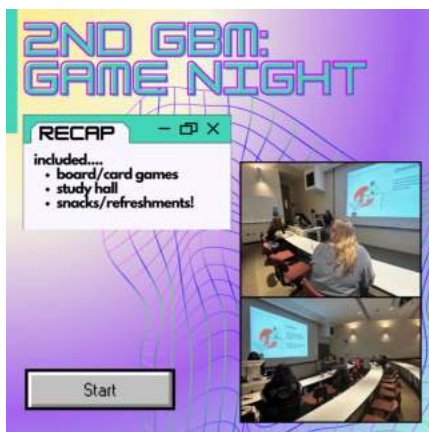
some examples with links to Girls Who Code posts that I have created



[Canva Link](#)



[Canva Link](#)



[Canva Link](#)



[Canva Link](#)



[Canva Link](#)



[Canva Link](#)

CAROLINA AR/VR:



[Canva Link](#)

UNC GRAPHICS & VIRTUAL REALITY RESEARCH GROUP:

3D DISPLAYS

how humans perceive the world in 3D

BINOCULAR DISPARITY (aka PARALLAX):

- slight differences between the images seen by each of your eyes (right vs. left)
- if image is perceived at similar positions → object is far away
- if image is perceived at different positions → object is close by

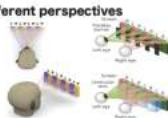
how we trick the brain into perceiving 3D images

LENTICULAR DISPLAYS:

- type of technology utilized to create images with an illusion of depth, movement, or multiple images that can change when viewed from different angles
- the 3D effect comes by interlacing images from slightly different perspectives



lenticular display with multiple images to gain 3D effect of this butterfly



Bringing Telepresence to Every Desk

WHY 3D VIDEO CONFERENCING?

video conferencing feels **UNNATURAL**:

- looking at an image
- no eye contact
- unable to move around to see other
- person from different viewpoints (stale)
- zoom fatigue

PROBLEM: cannot place camera in the middle of a screen for full in-person effect.

STARLINE: research project by Google

- aiming to create telepresence bringing...
- Immersive video conferencing
- 3D aspects
- eye contact
- in-person feeling intertwined with intimate interactions



MIKE'S RESEARCH

- solution: **DEEP LEARNING** to combat front-camera issue
- place several cameras around the screen to capture multiple viewpoints
- creates a 3D model

• **DIFFERENT** from Starline since...

- more affordable
- Starline is for executive and big cooperations
- costs ~\$0.5 million

- Research plans to make it more affordable and accessible for everyday use
- currently costs ~\$1500



FIGMA:

I also developed this comprehensive design kit using Figma as a reference guide, ensuring consistent stylistic coherence for future graphic creations within the GWC graphic team.



IMAGE EDITING W/FEATURES:

I've cultivated a strong interest in image editing, often enhancing images with additional features. Below is an example of one such edited image I created for my college thriving assignments!



VIDEO EDITING:

I have also been interested in video editing which can be showcased with some videos I have produced on Youtube: <https://www.youtube.com/@meganngao>

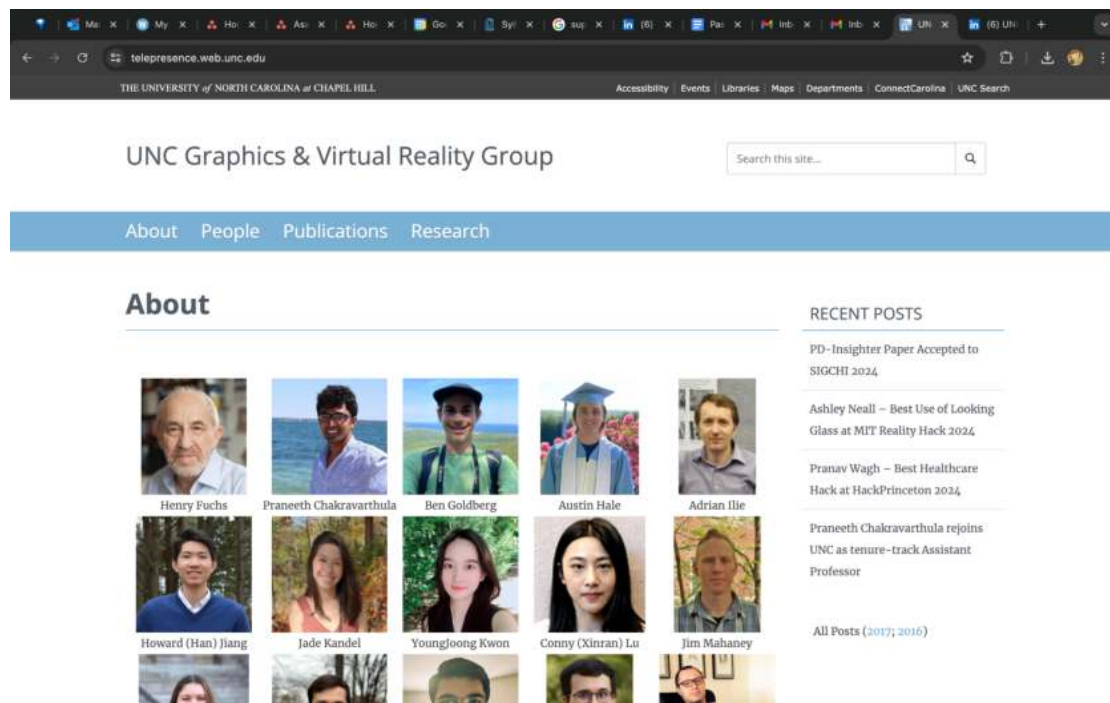
UI/UX DESIGNS:



[Replit Link.](#)

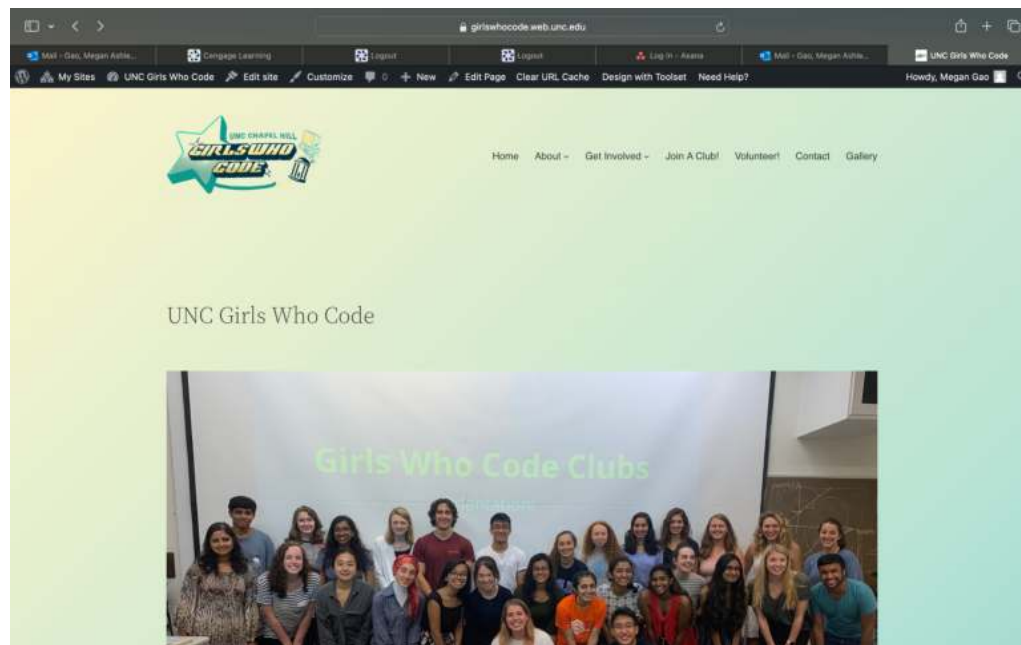
*this link includes other projects utilizing HTML, JavaScript, and CSS under portfolio tab (Kdrama Personality Quiz, Activist Toolkit Project, Algorithmic Justice Website)

Current UI/UX projects include:



[UNC Graphics & Virtual Reality Telepresences Website](#)

*helping to maintain and eventually user interface/experience on the website



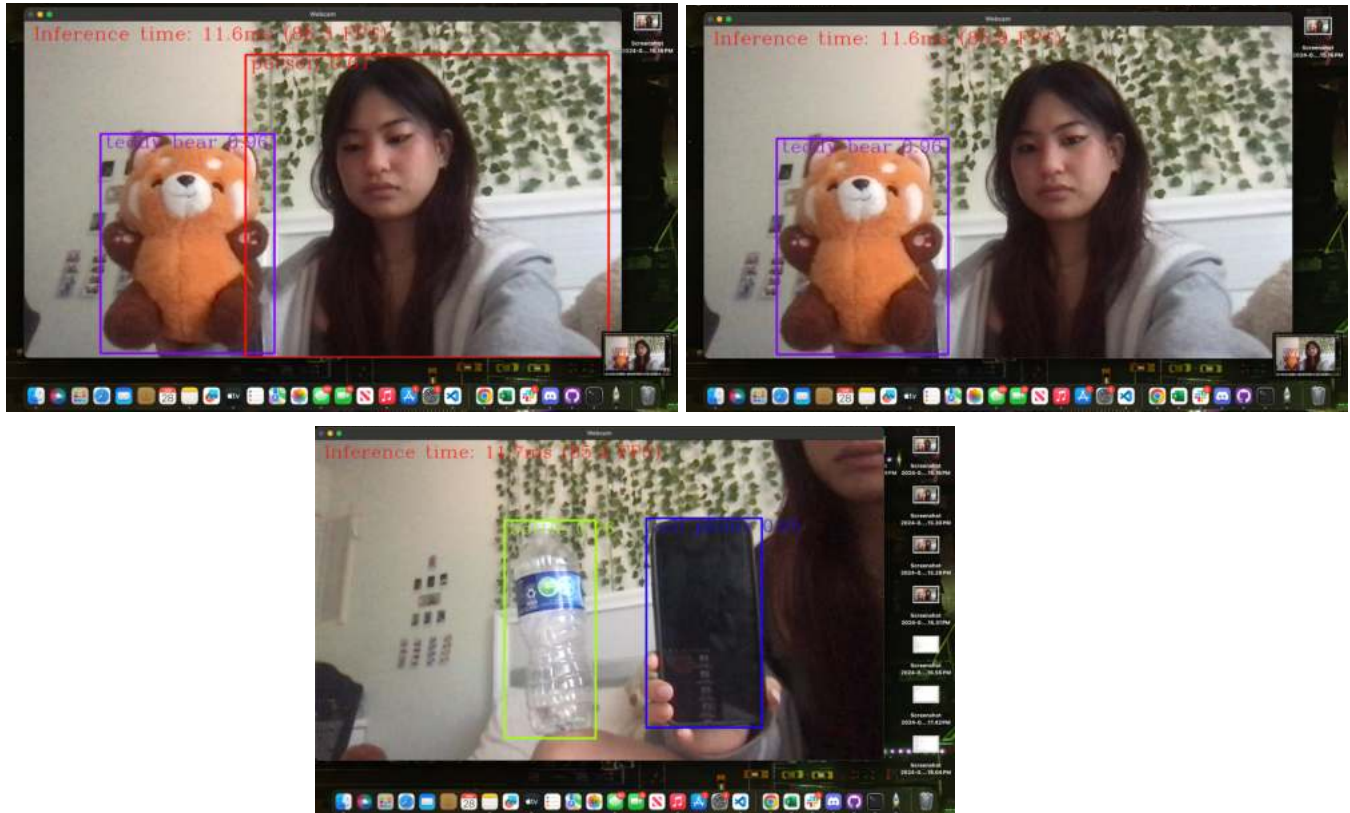
[UNC Girls Who Code Website](#)

*attempting to improve and develop web page for the Carolina Girls Who Code community

CURRENT PROJECTS

COMPUTER VISION:

The objective is to develop and train a device that can be positioned at the front of a door to enable real-time detection of objects and items within its field of view. The device utilizes a webcam to identify various objects, such as a person, a teddy bear, a bottle, and a phone, as demonstrated in the sample images below.



PERSONAL WEBSITE:

I am concurrently working on redesigning and rebuilding my personal website to highlight my past, current, and upcoming projects.