Final Project
Video Demo Requirements

☐ 1 minute to 5 minutes in length
☐ Quality over Quality
☐ Title / Team Member Names / ECE 196 Winter 2023 Annotated at beginning of video
☐ Not a presentation - a slide or two is okay if needed/helpful
☐ Highlight Design and Prototype (Graphics and Demo)
☐ Use editing software
☐ Voice over or discussion during video should be planned and practiced
☐ Be Clear and Creative
☐ Video accessible through youtube or google drive (ensure permissions are set to all with link)

Video Script

B: Hi! We are team 6, and I am Bao Thy Nguyen and these are my teammates!

A: And I'm Aidan Garamendi!

G: And I'm Garno Amirian!

B: For our project, we are doing a digital sign language interpreter and this is how it works.

A: First we need to record video of the signer and transfer that collected data over to the processing computer as it is happening in real time.

** Show camera and computer **

G: The computer then uses an EfficientNet Machine Learning model to analyze the signed data and determine what letter was signed. We chose an EfficientNet for this because of how it is able to classify our images with high accuracy.

Mention the accuracy score once we do have it/training process

B: We are using a 29 image classifier to determine which letter was signed, in addition to spaces and when you are not signing anything and also deleting a letter.

A: Using this rudimentary system we can determine the letter being signed in the live video. We can take this letter and send it to the wearable hardware, which displays the letters in order.

G: This process is done via bluetooth where the ESP32 receives the processed letter and transmits it to the OLED.

** Show a graphic or the process of the receiving/transmitting and the letter being displayed on the OLED**

B: Here's the live demo of our project working.

Finally we can bring all these different parts together to create the final product: a simple ASL closed captioning system

**Demonstration of signing "hello world" or something similar

A: That's our demo, thank you for listening! :D