

## Generating Mirrored Data

- Follow the steps to download ffmpeg
  - <https://www.videoproc.com/resource/how-to-install-ffmpeg.htm#:~:text=There%20are%20generally%20three%20ways%20to%20install%20FFmpeg,and%20run%20the%20static%20build%20downloaded%20from%20https%3A%2F%2Fffmpeg.org%2Fdownload.html>
- Run the following command to mirror video
  - `ffmpeg -i <Original_Video>.mp4 -vf hflip -c:a copy <Mirrored_Video>.mp4`
- Auto record script that incorporates generating mirrored data

```
1 import os
2 import time
3 import string
4
5 ListOfSigns = list(string.digits)
6 parent_dir = r"C:/Users/Alex Anderson/Documents/EECS_581/DataRec/depthai-experiments/gen2-record-replay"
7 for Gloss in ListOfSigns:
8     glossPath = os.path.join(parent_dir, Gloss)
9     #print(glossPath)
10    try:
11        os.mkdir(glossPath)
12    except:
13        print("Folder for Gloss Already Exists, moving on")
14    #os.chdir(glossPath)
15    fileNum = 1
16    while True:
17        videoPath = os.path.join(glossPath, str(fileNum))
18        mirroredVideoPath = os.path.join(glossPath, "mirrored" + str(fileNum))
19        if(os.path.exists(videoPath)):
20            fileNum+=1
21        else:
22            break
23
24    for iteration in range(0,4):
25        videoPath = os.path.join(glossPath, str(fileNum+iteration))
26        os.mkdir(videoPath)
27        print("recording " + Gloss + " in 2 sec")
28        time.sleep(2)
29        print("recording video #" + str(iteration) + " in 2 sec")
30        #record the video
31        os.system("python record.py -p" + "\"" + videoPath + "\"")
32        print("done recording video #" + str(iteration) + " of " + Gloss)
33        os.system("ffmpeg -i " + videoPath + " -vf hflip -c:a copy" + mirroredVideoPath)
34    print("")
35    #put the video in the new folder
36    os.chdir(parent_dir)
```