

## Demo 22: Video - Exercises

DSP Lab: ECE 6183  
Spring 2021

- 1) Based on the Python demo program 'blur\_video.py', write a Python program that detects edges of each frame of video in real time. The low-pass filter in the demo program should be replaced by a high-pass filter.
- 2) Using cv2, write a Python program to find red pixels in an image.
- 3) Using cv2, write a Python program to find green items in an image. Discuss how this can be done. In addition to your code, submit the original image (an image of your choice), the mask image, and detected pixels.
- 4) Use cv2 to find red pixels in a video (in real-time, as it is captured).

To submit: (1) and (3).