Homework

OpenCV and Canny Edge Detection

CMPE 258

1. By now you should have both OpenCV and TensorFlow installed. Use you smart phone to take record a 10-15 second video clip. Convert it to mp4 (mpeg4) format using an online tool. This video clip will be used for the future testing purpose. For now, just use any media player you may have to capture a display of the video, e.g., to capture an image from the video clip to be processed in this homework.

2. Write a simple OpenCV program based on the reference code in the class repository from the github whose link is given below.

3. In your program,

(3.1) display the original image (color) and use OpenCV function to convert the color image to gray scale image and then display the gray scale image;

(3.2) perform Canny Edge Detection on the gray scale image and display the edge map (the result of the edge detection) side by side with the original color image and the gray scale image;

4. Do screen capture with all 3 images mentioned above (original and gray scale images, plus edge map), be sure your screen capture will have your personal identifier, either your name on the caption of the display or file folders show your identity. Then covert it to pdf file using any online tool; then

5. create a folder with the following naming convention and place the openCV source code and the pdf file into this folder. (Use the following naming convention:

hw1_opencv_canny_cmpe258_First_last_name_SID

Then zip it and submit it to the CANVAS.

(END)