

```
In [2]: import numpy as np
import matplotlib.pyplot as plt
import cv2 as cv
```

Create Edge Detection With HSV Frame

```
In [2]: cam = cv.VideoCapture(0)

while True:
    _, img = cam.read()
    img = cv.cvtColor(img , cv.COLOR_RGB2HSV)
    img = cv.cvtColor(img , cv.COLOR_BGR2HSV)
    img = cv.cvtColor(img , cv.COLOR_BGR2RGB)

    img = cv.Canny(img , 70,100)
    img = cv.Canny(img , 100,200)
    img = cv.Canny(img , 150 , 200)

    cv.imshow("hsv" , img)
    cv.imshow("BGR_HSV" , img)
    cv.imshow("BGR_RGB" , img)
    if cv.waitKey(1) & 0xFF == ord("a"):
        break
cam.release()
cv.destroyAllWindows()
```

Blur the Frame

```
In [3]: cam = cv.VideoCapture(0)

while True:
    _, img = cam.read()

    blur1 = cv.blur(img , (2,2))
    blur2 = cv.blur(img , (4,4))
    blur3 = cv.blur(img , (6,6))
    blur4 = cv.blur(img , (8,8))
    blur5 = cv.blur(img , (10,10))

    cv.imshow("blur1" , blur1)
    cv.imshow("blur2" , blur2)
    cv.imshow("blur3" , blur3)
    cv.imshow("blur4" , blur4)
    cv.imshow("blur5" , blur5)

    if cv.waitKey(1) & 0xFF == ord("s"):
        break

cam.release()
cv.destroyAllWindows()
```

Edge detection By using Blur Frame

```
In [ ]: cam = cv.VideoCapture(0)

while True:

    _, img = cam.read()

    blur1 = cv.blur(img , (2,2))
    blur2 = cv.blur(img , (4,4))
    blur3 = cv.blur(img , (6,6))
    blur4 = cv.blur(img , (8,8))
    blur5 = cv.blur(img , (10,10))

    edge1 = cv.Canny(blur1 , 20,30)
    edge2 = cv.Canny(blur2 , 30,40)
    edge3 = cv.Canny(blur3 , 40,50)
    edge4 = cv.Canny(blur4 , 50,60)
    edge5 = cv.Canny(blur5 , 60,70)

    cv.imshow("edg1 " , edge1)
    cv.imshow("edge2" , edge2)
    cv.imshow("edge3" , edge3)
    cv.imshow("edge4" , edge4)
    cv.imshow("edge5" , edge5)
```

edge detection with blur frame

```
In [4]: cam = cv.VideoCapture(0)

while True:

    _, img = cam.read()

    blur1 = cv.blur(img , (2,2))
    blur2 = cv.blur(img , (4,4))
    blur3 = cv.blur(img , (6,6))
    blur4 = cv.blur(img , (8,8))
    blur5 = cv.blur(img , (10,10))

    edge1 = cv.Canny(blur1 , 50,60)
    edge2 = cv.Canny(blur2 , 50,60)
    edge3 = cv.Canny(blur3 , 60,50)
    edge4 = cv.Canny(blur4 , 60,60)
    edge5 = cv.Canny(blur5 , 60,70)

    cv.imshow("edg1 " , edge1)
    cv.imshow("edge2" , edge2)
    cv.imshow("edge3" , edge3)
    cv.imshow("edge4" , edge4)
    cv.imshow("edge5" , edge5)

    if cv.waitKey(1) & 0xFF == ord("d"):
        break
```

```
cam.release()  
cv.destroyAllWindows()
```

In []: