VISIÓN ARTIFICIAL

Práctica 8. Edge detection

Ingeniería en Mecatrónica
6to semestre

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CODIGO:

```
import cv2
import numpy as np

cap = cv2.VideoCapture(0)

while(1):

    # Take each frame
    _, frame = cap.read()
    hsv = cv2.cvtColor(frame, cv2.COLOR_BGR2HSV)

    lower_red = np.array([30,150,50])
    upper_red = np.array([255,255,180])

    mask = cv2.inRange(hsv, lower_red,
    upper_red) res = cv2.bitwise_and(frame,frame,
    mask= mask)

    laplacian = cv2.Laplacian(frame,cv2.CV_64F)
    sobelx =
    cv2.Sobel(frame,cv2.CV_64F,1,0,ksize=5)
    sobely =
    cv2.Sobel(frame,cv2.CV_64F,0,1,ksize=5)
    edges = cv2.Canny(frame,100,200)

    cv2.imshow('Original',frame)
    cv2.imshow('Edges',edges)
```

```
    cv2.imshow('Mask',mask)
    cv2.imshow('laplacian',laplacian)

    cv2.imshow('sobelx',sobelx)
    cv2.imshow('sobely',sobely)

    k = cv2.waitKey(5) &
    0xFF if k == 27:
        break

cv2.destroyAllWindows()
cap.release()
```