## Invisibility\_OpenCV\_Project

July 20, 2020

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[1]: import cv2
     import time
     import numpy as np
     fourcc= cv2.VideoWriter_fourcc(*'XVID')
     out=cv2.VideoWriter('output.avi',fourcc,20.0, (640,480))
     cap=cv2.VideoCapture(0)
     time.sleep(5)
     count=0
     background=0
     for i in range(60):
         ret, background=cap.read()
     background=np.flip(background, axis=1)
     while (cap.isOpened()):
         ret,img=cap.read()
         if not ret:
             break
         count+=1
         img=np.flip(img,axis=1)
         hsv=cv2.cvtColor(img, cv2.COLOR_BGR2HSV)
         lower_red=np.array([0,120,70])
         upper_red=np.array([9,255,255])
         mask1=cv2.inRange(hsv,lower_red,upper_red)
         lower_red=np.array([171,120,70])
         upper_red=np.array([180,255,255])
         mask2=cv2.inRange(hsv,lower_red,upper_red)
         {\tt mask1=mask1+mask2}
         mask1=cv2.morphologyEx(mask1, cv2.MORPH_OPEN,np.ones((3,3),np.uint8))
         mask1=cv2.morphologyEx(mask1, cv2.MORPH_DILATE,np.ones((3,3),np.uint8))
```

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mask2=cv2.bitwise_not(mask1)
res1=cv2.bitwise_and(img,img,mask=mask2)
res2=cv2.bitwise_and(background,background,mask=mask1)

finalOutput=cv2.addWeighted(res1,1,res2,1,0)
out.write(finalOutput)
cv2.imshow("magic",finalOutput)
cv2.waitKey(10)

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

[]: