**Vaizdu suradimas paveiksliuke**

**import** numpy **as** np  
**import** cv2  
  
  
img1\_bgr = cv2.imread(**'Butelis.bmp'**)  
img1\_gray = cv2.cvtColor(img1\_bgr,cv2.COLOR\_BGR2GRAY)  
  
img2\_bgr = cv2.imread(**'craide.bmp'**,0)  
w,h = img2\_bgr.shape[::-1]  
  
res = cv2.matchTemplate(img1\_gray, img2\_bgr, cv2.TM\_CCOEFF\_NORMED)  
threshold = 0.9  
loc = np.where(res>=threshold)  
  
**for** pt **in** zip(\*loc[::-1]):  
 cv2.rectangle(img1\_bgr,pt,(pt[0]+w,pt[1]+h),(0,255,255),2)  
  
cv2.imshow(**'detected'**, img1\_bgr)  
  
cv2.waitKey(0)  
cv2.destroyAllWindows()

**import** cv2  
**import** numpy **as** np  
  
img = cv2.imread(**'butel.bmp'**,0)  
img = cv2.medianBlur(img,5)  
  
*#th2= cv2.adaptiveThreshold(img,255,cv2.ADAPTIVE\_THRESH\_MEAN\_C,cv2.THRESH\_BINARY,11,2)*th3 = cv2.adaptiveThreshold(img,255,cv2.ADAPTIVE\_THRESH\_GAUSSIAN\_C,cv2.THRESH\_BINARY,11,2)  
  
cv2.imshow(**'ADTHMEAN'**,th2)  
cv2.imshow(**'ADTHGAYS'**,th3)  
  
cv2.waitKey(0)  
cv2.destroyAllWindows()

IS TAMSAUS FONO ISKIRIA BALTAI JUODA PAVEIKSLIUKA

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**import** cv2  
**import** numpy **as** np  
  
cap = cv2.VideoCapture(0)  
  
**while** True:  
 ret,frame = cap.read()  
  
 hsv = cv2.cvtColor(frame,cv2.COLOR\_BGR2HSV)  
 lower=np.array([90,0,0])  
 upper=np.array([125,255,255])  
  
 kernel = np.ones((5,5),np.uint8)  
  
  
 mask = cv2.inRange(hsv,lower,upper)  
 res = cv2.bitwise\_and(frame,frame,mask = mask)  
  
 erosion = cv2.erode(res,kernel,iterations=1)  
 dilation = cv2.dilate(erosion,kernel,iterations=1)  
  
 cv2.imshow(**'res'**,res)  
 cv2.imshow(**'or'**,dilation)  
 cv2.imshow(**'er'**,erosion)  
  
  
 k = cv2.waitKey(5) &0xFF  
 **if** k == 27:  
 **break**cap.release()  
cv2.destroyAllWindows()