

## Filtering by color

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In [1]: import cv2
import numpy as np

# initialize webcam
cap=cv2.VideoCapture(0)

# define range of purple color in HSV
lower_color = np.array([85,0,0]) #Lower green
upper_color = np.array([105,255,255]) #upper green
```

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In [2]: #Loop until break statement is executed
while True:
    # read webcam image
    ret, frame = cap.read()

    #Convert image from RGB/BGR to HAS so we easily filter
    hsv_img = cv2.cvtColor(frame, cv2.COLOR_BGR2HSV)

    #use inrange to capture only the values between lower & upper color
    mask = cv2.inRange(hsv_img, lower_color, upper_color)

    # perform bitwise AND on mask on the original frame
    result = cv2.bitwise_and(frame, frame, mask = mask)

    cv2.imshow('Original', frame)
    cv2.imshow('mask', mask)
    cv2.imshow('Filtered color only', result)

    if cv2.waitKey(1)==13: #13 is the Enter Key
        break
cap.release()
cv2.destroyAllWindows()
```

In [ ]:

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