

what is hsv?

The HSV model describes colors similarly to how the human eye tends to perceive color.

RGB defines color in terms of a combination of primary colors.

In situations where color description plays an integral role, the HSV color model is often preferred over the RGB model.

'Hue' represents the color

'Saturation' represents the amount to which that respective color is mixed with white

'Value' represents the amount to which that respective color is mixed with black (Gray level).

In RGB, we cannot separate color information from luminance.

HSV or Hue Saturation Value is used to separate image

luminance from color information.

(luminance is intensity of light)

how to get the hsv value?

$[H-10, 100, 100]$  and  $[H+10, 255, 255]$  as lower bound and upper bound

```
red = np.uint8([[[[0,0,255]]]])
```

```
hsv_red = cv2.cvtColor(red,cv2.COLOR_BGR2HSV)
```

```
print(hsv_red)
```