

Pipeline

① Load all 600 images in the HSV format

Let $I_n = n$ th image \Rightarrow Dataset $I = \{I_0, I_1, I_2, \dots, I_{600}\}$
Each image is of size $219 \times 360 \times 3$

② For each image in Set I , decompose image into Hue, Saturation, Value Channel

Let $h_n =$ hue channel of n th image in I

$s_n =$ Saturation channel of n th ~~channel~~ image in I

$v_n =$ value channel of n th image in I

For each ~~image~~ k in I , standardize ~~the~~ each channel

1) ~~Divide~~ $h_k / 180$

2) $s_k / 180$

3) $v_k / 180$

③ For each image k in I , flatten I_k from

$219 \times 360 \times 3$ to 657×360 , ~~and~~

Horizontally stack the image such that final matrix is

$$\begin{bmatrix} I_0 & I_1 & I_2 & \dots & I_{600} \end{bmatrix}$$

Size = 657×216000