FIGURE 6.12
Conceptual relationships between the RGB and HSI color models.
Chapter 6

Color Image Processing

**FIGURE 6.13** Hue and saturation in the HSI color model. The dot is an arbitrary color point. The angle from the red axis gives the hue, and the length of the vector is the saturation. The intensity of all colors in any of these planes is given by the position of the plane on the vertical intensity axis.
FIGURE 6.14 The HSI color model based on (a) triangular and
FIGURE 6.14
(b) circular color planes. The triangles and circles are perpendicular to the vertical intensity axis.
Color bar interpretation of HSV. Two primaries are mixed with white (gray).
Chapter 6
Color Image Processing

FIGURE 6.8 RGB 24-bit color cube.
FIGURE 6.15 HSI components of the image in Fig. 6.8. (a) Hue
FIGURE 6.15 (b) saturation.
FIGURE 6.15  (c) intensity
Chapter 6
Color Image Processing

FIGURE 6.16 (a) RGB image and the components of its corresponding HSI image: (b) hue, (c) saturation, and (d) intensity.
FIGURE 6.17  (a)–(c) Modified HSI component images. (d) Resulting RGB image. (See Fig. 6.16 for the original HSI images.)