

Color space conversion

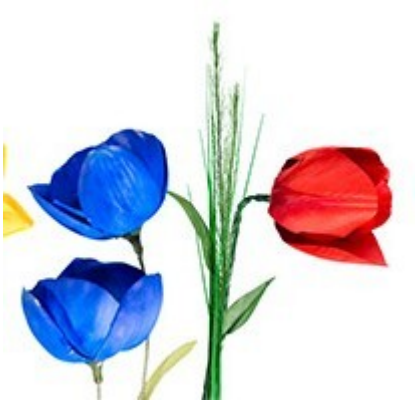


Fig: RGB Image



Fig: Gray image

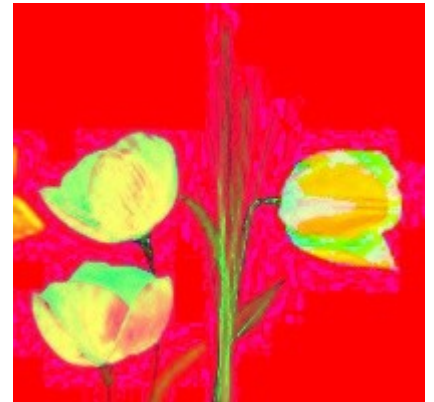


Fig: HSV Image

Image Filtering/ Blur

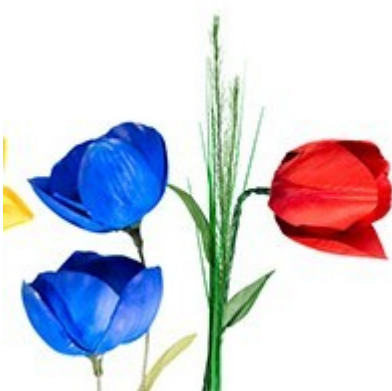


Fig: original Image



Fig: Gaussian filtered

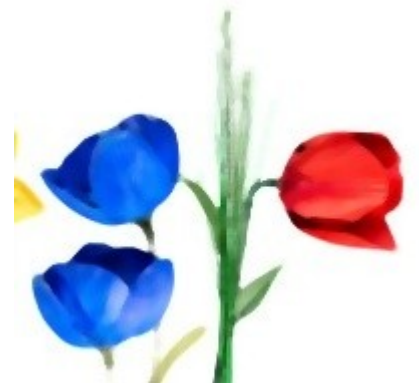


Fig: median filtered

Histogram Equalization



Fig: Original image



Fig: Histogram equalized image

Image Thresholding



Fig: Original image

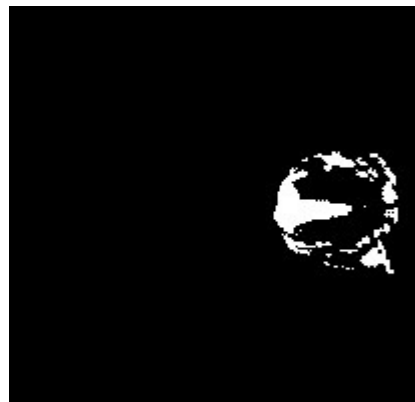


Fig: Threshold done for red color

You can track the red flower in this image.

Morphological Erosion



Fig: source image

→ Erosion →

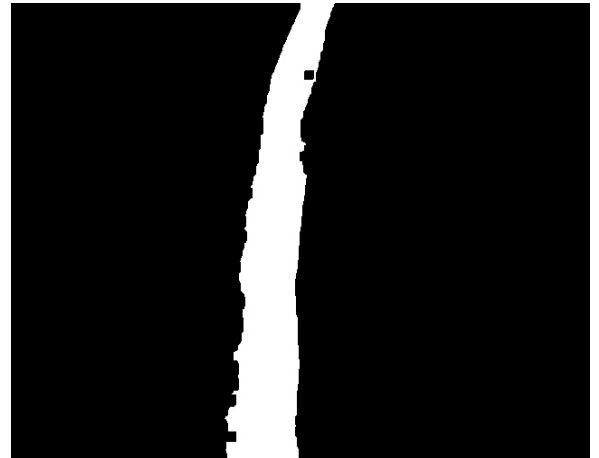


Fig: unwanted part removed

Morphological Dilation (opposite of Erosion)

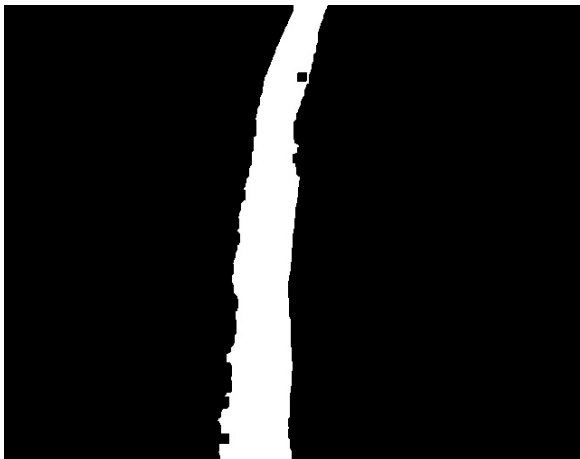


Fig: source Image

→ Dilation →



Fig: unwanted dot inside track
has removed now

Morphological Opening

Erosion + Dilation

Morphological Closing (reverse of opening)

Dilation + Erosion

Feature Extraction: **Hough Circle**



Fig: Source image



Fig: Thresholded

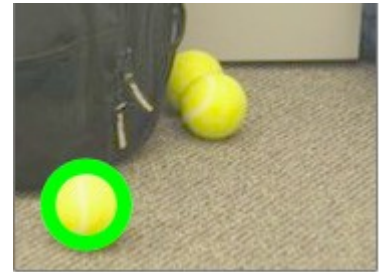


Fig: ball detection using hough circle method.

You can find round shape object using this method.

Feature Extraction: **Contour Detection**

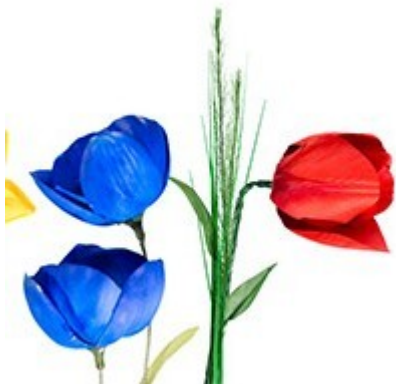


Fig: Original image

→ Contour Detection →

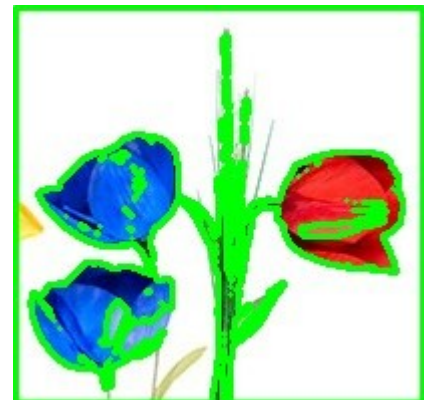


Fig: Contour Detection

Later, you can find out how many flower in this image present.

Feature Extraction: **Edge Detection**



Fig: Canny Edge Detection

Feature Extraction: **SIFT**



Fig: original image

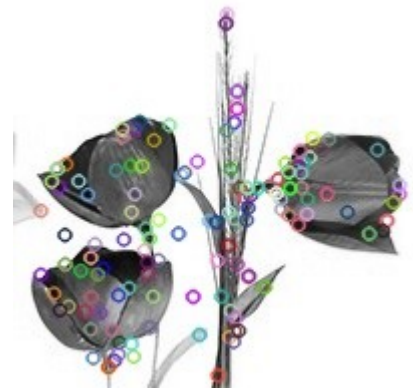


Fig: feature detected image.

Later, these feature can be used for detecting object.