

Simple Hand Posture Detection for Digital Image Processing

Write a complete program (using any programming language) to apply edge detection.

In doing as:

Step 1: Input Images:

- a. The dataset consists of more than 4 images; each image has a different hand sign.
- b. User takes a picture of the hand to be tested through the real time camera

Step 2: Image Pre-processing

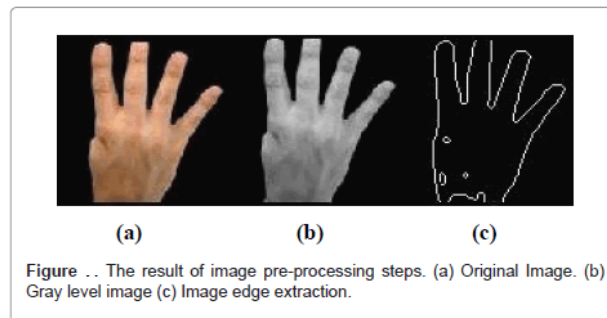
- a. The image is converted into gray scale
- b. Enhancement image using Filters technique
Choose one of below filters and discuss why you use it?
(Smoothing filter, sharpening filter, smooth then sharp, sharp then smoothed, other)
- c. Convert the gray scale image into a binary image.

Step3: Segmentation image from background (how?) (thresholding, region growing, splitting region)

Step 4: Detect the border of hand image

- a. Choose one of below filters and discuss why you use it?
(sobel , prewitt, guassian, other)
- b. Then remove weak edge (how?).

Step 5: display one image contain the original image, gray image and the edge image.



The detection result for what you want your application to do?