



**OpenCV-Python** is a library of **Python** bindings designed to solve computer vision problems. All the **OpenCV** array structures are converted to and from Numpy arrays. This also makes it easier to integrate with other libraries that use Numpy such as SciPy and Matplotlib.

### **Steps To Perform the Model:**

Image Pre-processing:

1. Read the image
2. Display the image
3. Rotate the image by 90 degrees
4. Crop the image
5. Resize the image a) reduce the size with row and column length  
b) with axis values
6. Adjust Image Contrast
7. Blur the image a) Gaussian/Median Blur (blur the image by 50%)
8. Detect the edges (Canny Edge Detector)
9. Convert image to grayscale (Black & White)
10. Centroid (Centre of blob) detection using Moment
11. Apply a mask for a coloured image
12. Color detection
13. Reduce Noise
14. Get image contour
15. Remove Background from an image
16. Scan Copy:  
Read the text image and create a scan copy of the given image
17. FaceDetection:  
Write a code to capture a video and detect facial landmarks from the frames and create a blank video to plot those facial landmarks

**Note:** For any doubts clarifications, please join the mentor session from 2:00 pm to 6:00 pm.

Thanks and Regards,  
Innomatics.