Edge and Corner Detection

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Canny Edge Detector

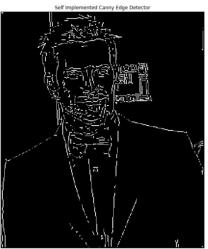
Algorithm

- Gaussian Smoothing
- Sobel Edge Detection
- Finding magnitude and direction of edge
- Non-maximal suppression
- Hysteresis thresholding
- Edge Linking

Results:







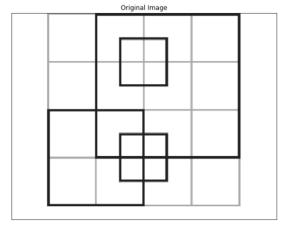


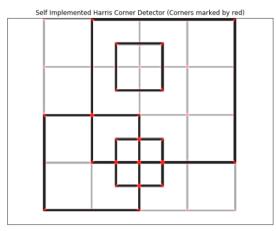
Harris Corner Detector

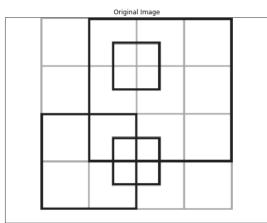
Algorithm:

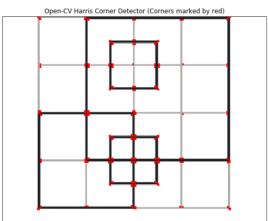
- Gaussian Smoothing
- Sobel Filtering
- Forming matrix M.
- Finding eigenvalues and R.
- Corners are those pixels whose R value is large.

Results:









References:

- https://opencv-python-tutroals.readthedocs.io/en/latest/py_tutorials/py_feature2d/py_feature2 harris/py_features_h_arris.html
- https://towardsdatascience.com/canny-edge-detection-step-by-step-in-python-computer-vision-b49c3a2d8123
- https://docs.opencv.org/trunk/da/d22/tutorial py canny.html
- http://www.adeveloperdiary.com/data-science/computer-vision/implement-canny-edge-detector-using-python-from-scratch/