Edge and Boundary Detection

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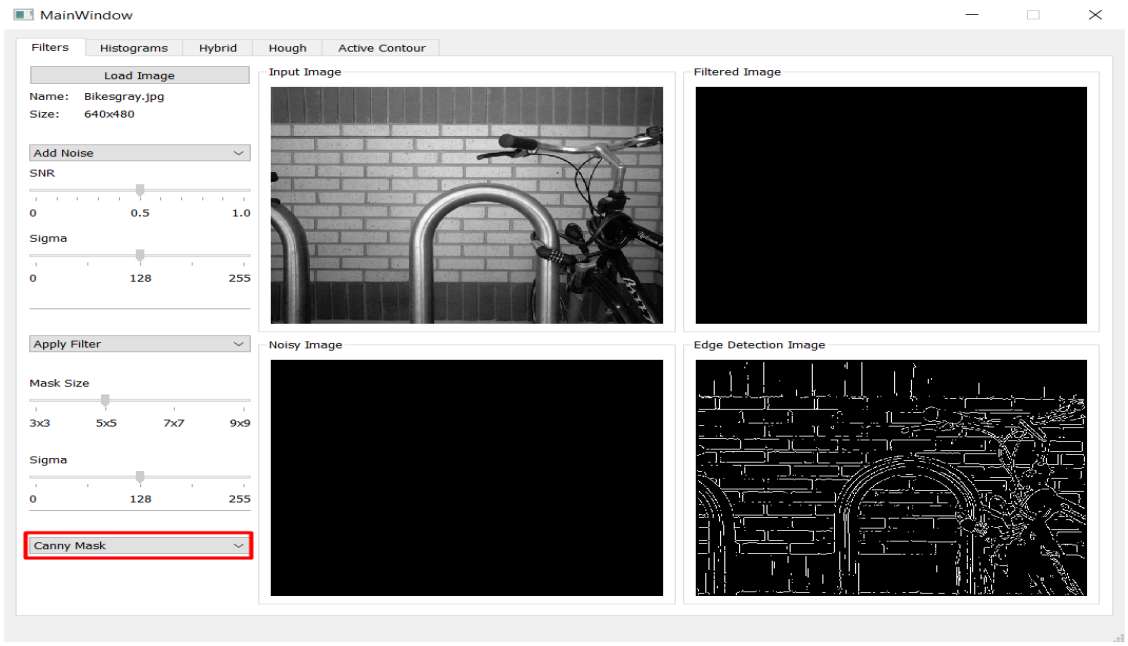
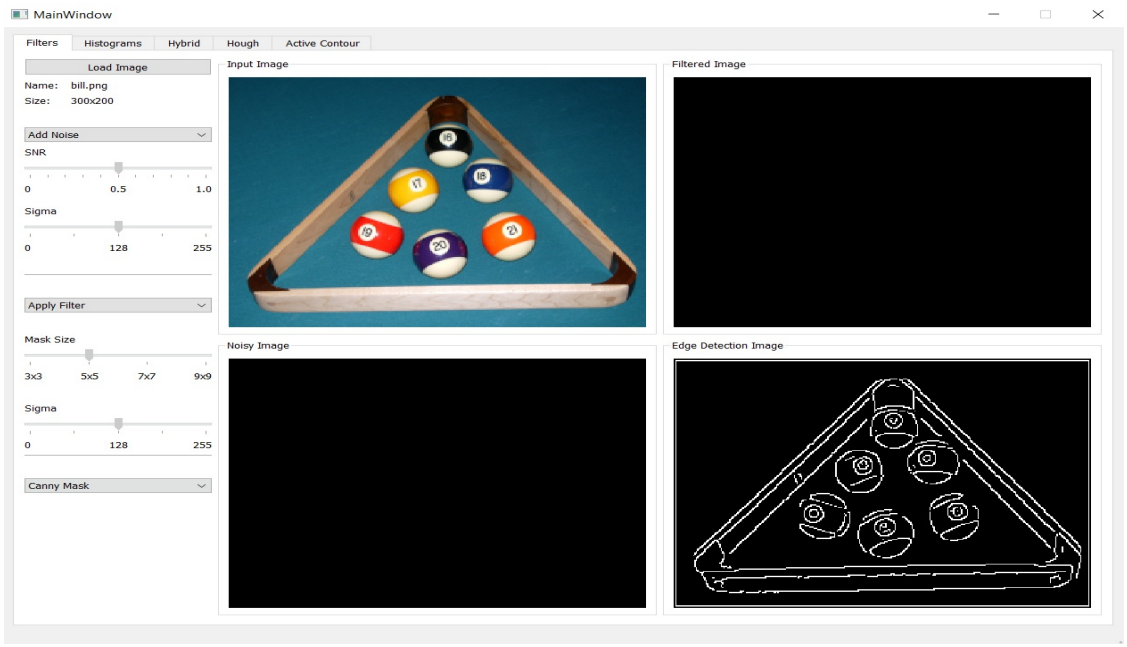
Edge Detection Using Canny Edge Detector

The Canny edge detector is an edge detection operator that uses a multi-stage algorithm to detect a wide range of edges in images.

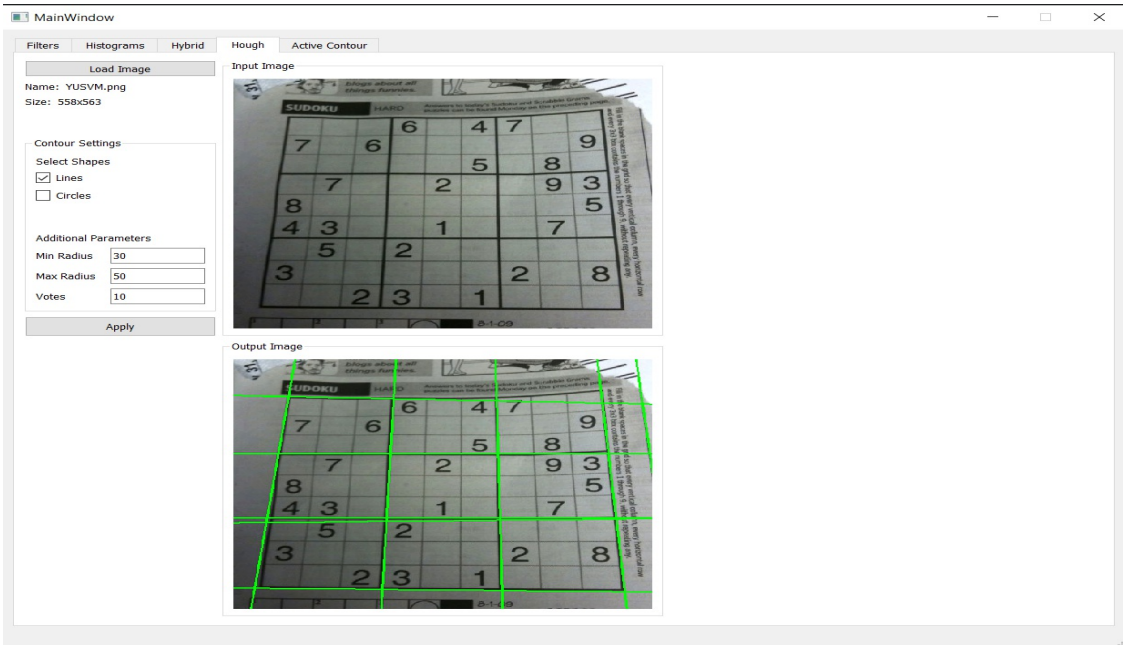




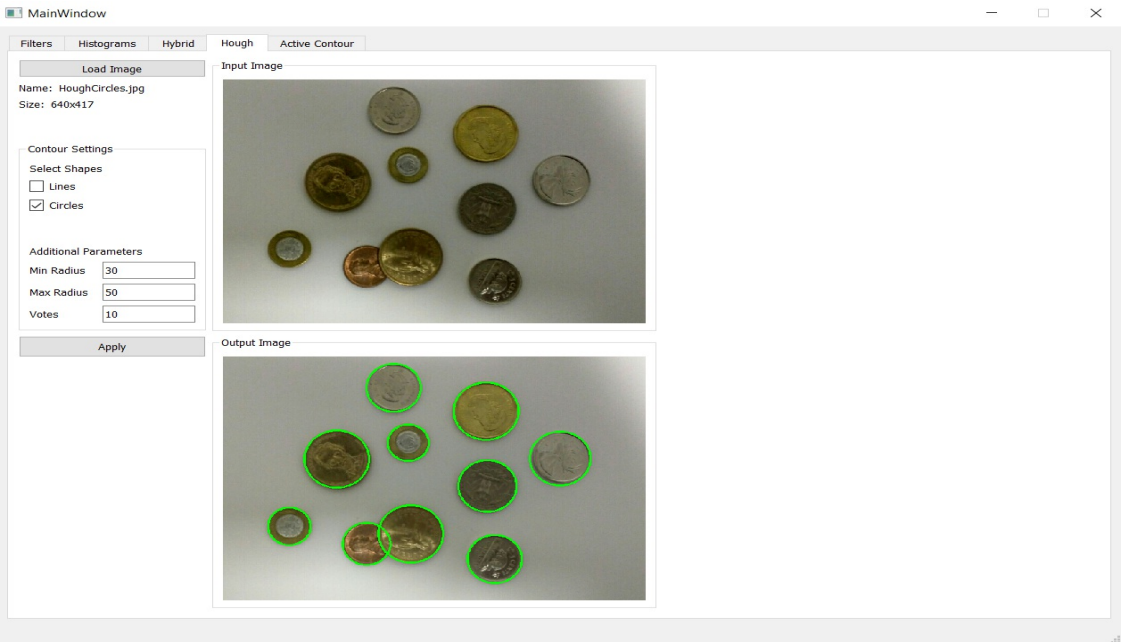
Hough Transformation

The Hough transform is a technique that locates shapes in images. In particular, it has been used to extract lines, circles and ellipses if you can represent that shape in mathematical form.

Line Detection



Circles Detection



Active Contour Model (Using Greedy Algorithm)

Active contour is one of the active models in segmentation techniques, which makes use of the energy constraints and forces in the image for separation of region of interest.

Active contour defines a separate boundary or curvature for the regions of target object for segmentation.

Result of applying the algorithm on the big circle