CSI4133_Lab4

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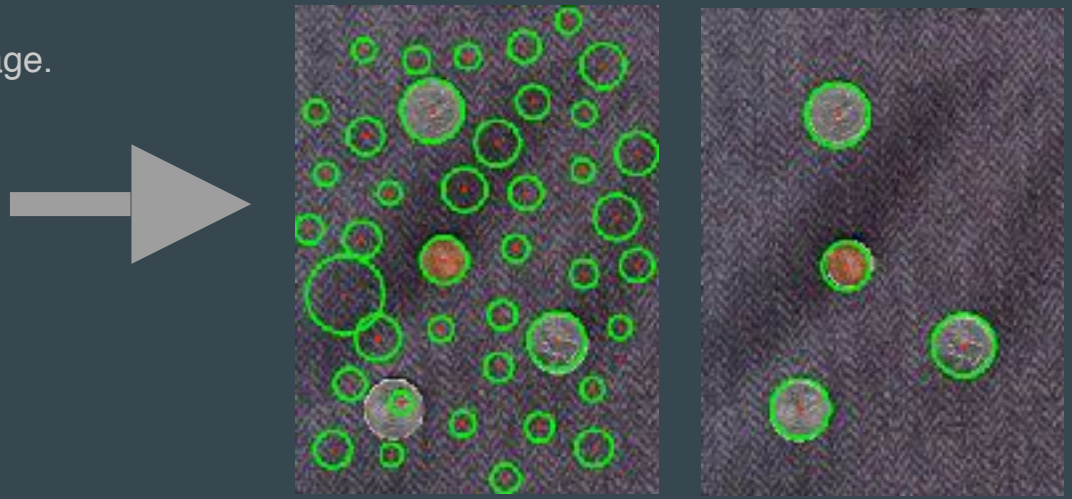
- Detecting Circles in an Image.
- Detecting Lines and Line-Intersections in an Image

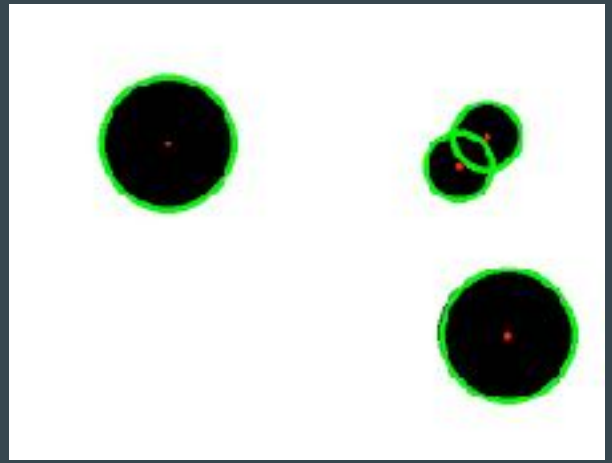
Detecting Circles in an Image

- Read the input image.
- Convert from RGB image to intensity image.
- Image filtering.
    - Reduce the noise
    - Avoid false circle detection



- Apply Circle Hough Transform to detect circles in the image.
- Display the result.

Detecting Circles in an Image (Cont.)



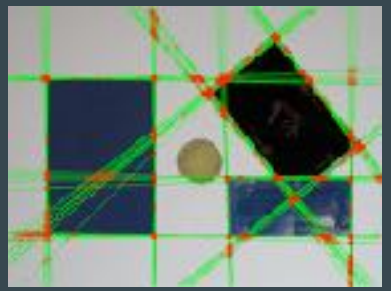
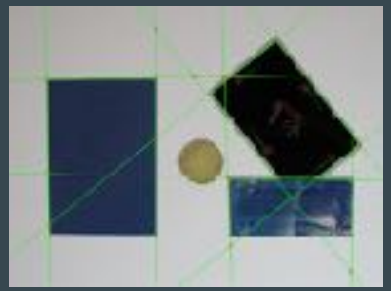
Detecting Lines and Line-Intersections in an Image

- Read the input image.
- Convert from RGB image to intensity image.
- Image filtering.
- Edge detection (eg: Canny).
    - Parameters of the Canny edge detection method are very important!



Detecting Lines and Line-Intersections in an Image (Cont.)

- Apply Line Hough Transform to detect lines in the image.
    - Refine the detection results.

- Calculate the intersection points between each line.
- Display the result.

Detecting Lines and Line-Intersections in an Image (Cont.)