GCV Homework 1: Camera Distortion Estimation from Straight Line
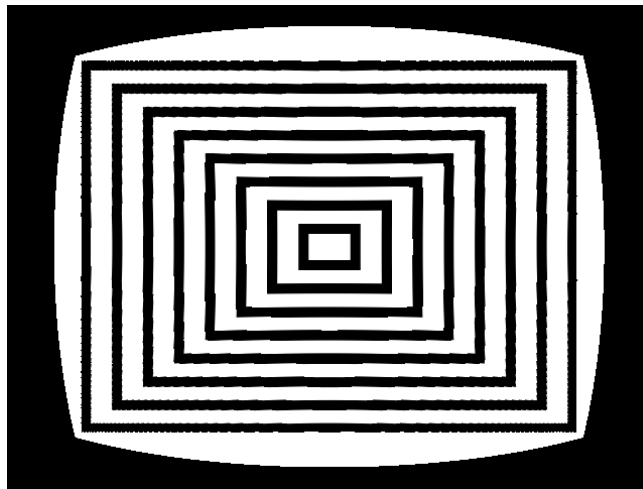
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1 Image 1

Parameters:

$$x_0 = 320.0, y_0 = 240.0, k = 1.6858525847202046e - 06$$
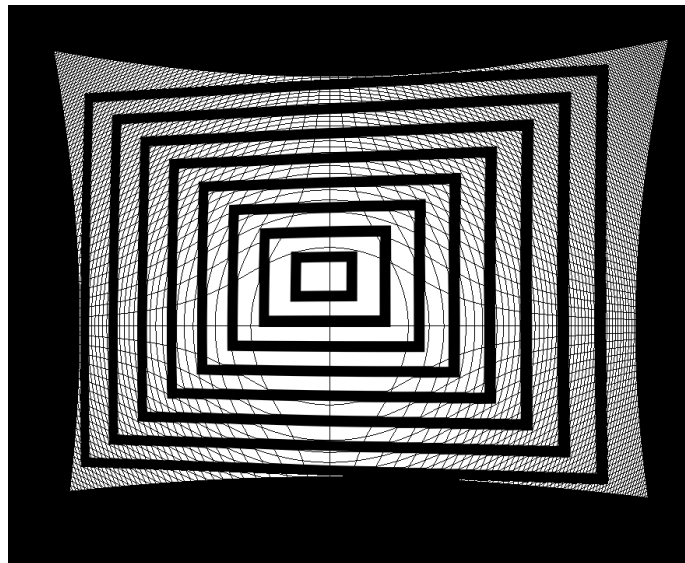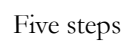
Undistort image:

2 Image 2

Parameters:

$$x_0 = 293.1108, y_0 = 292.9755, k = -9.861409169621858e - 07$$

Undistort image:

Appendix

For image 2, select line 1,7,15.

Five steps

1. get_points(filename)

2. get_ABC(points)

3. get_x0y0(ABC_raw)

4. get_lamda(x0,y0,a,b,c)

5. undistort(img, x0, y0, lamda)