1 Week2

1.1 Exercise 2.1

In this exercise you will see that all the points are displayed, but actually there are only 800 x 800 pixels in the camera, so the plot does not show, what the camera would see, as the top row of points will be outside.

If your image points are called q, you can use:

```
print("Number of points outside: ",\
sum(np.logical_or(q[1] > 800, q[0] > 800)))
```

you will see that there are 20 points outside the image.

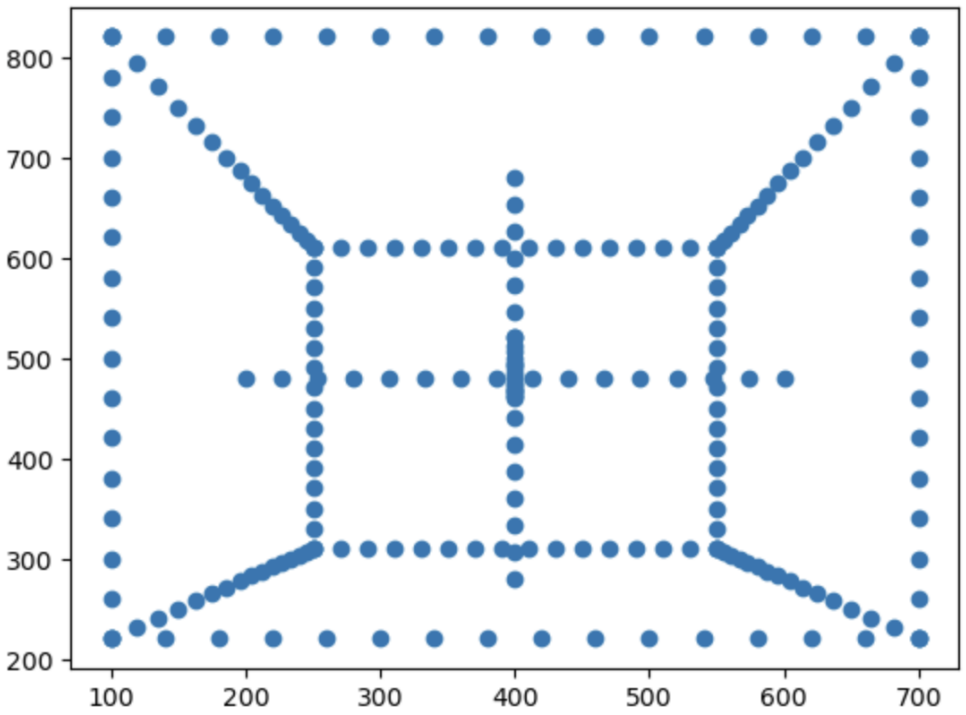

Figure 1: Solution to Exercise 2.1

1.2 Exercise 2.2

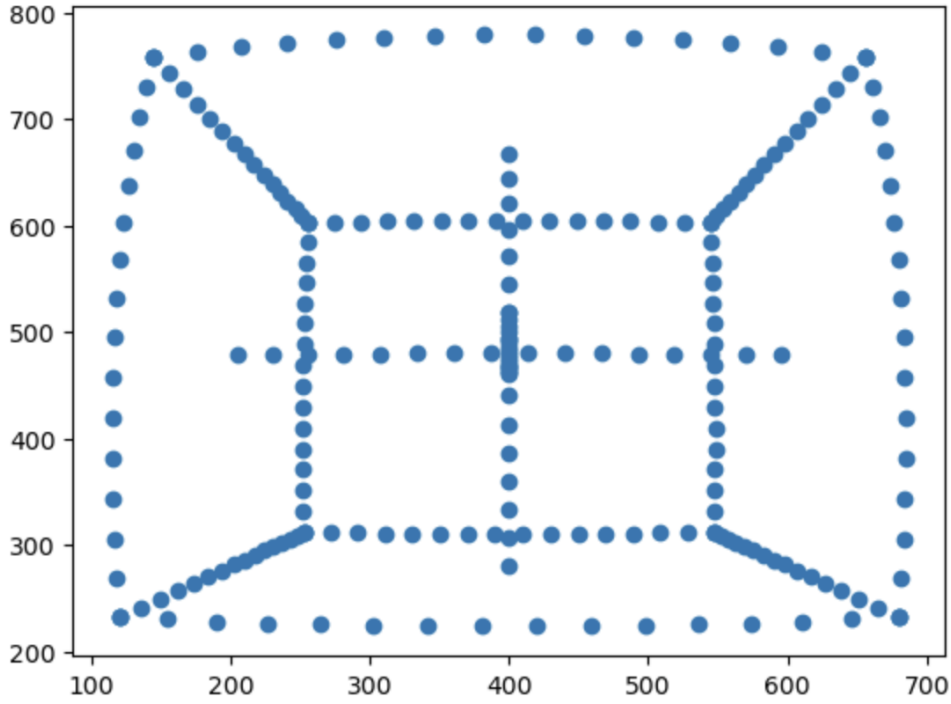

Figure 2: Solution to Exercise 2.2

1.3 Exercise 2.3

Here you see the image with radial distortion.

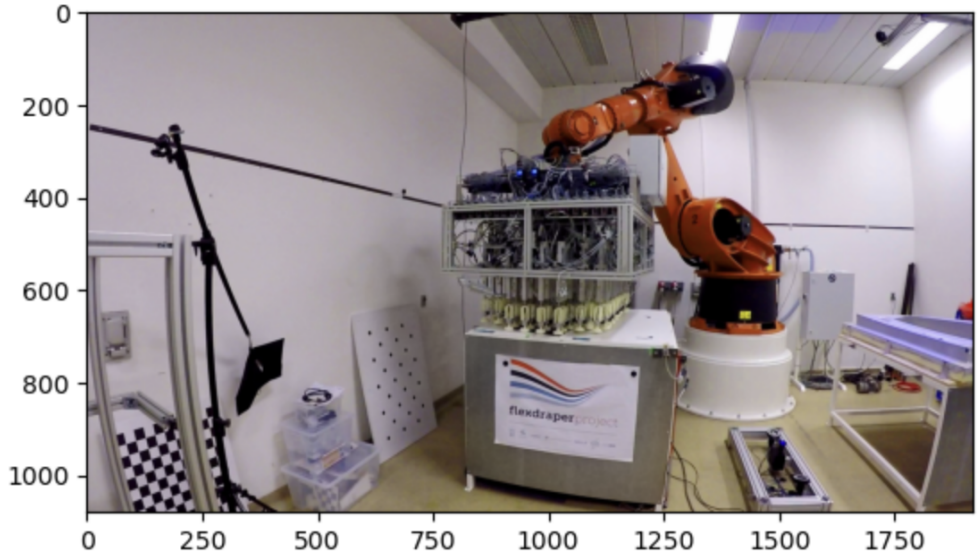

Figure 3: Solution to Exercise 2.3

1.4 Exercise 2.4

Here you see the undistorted image.

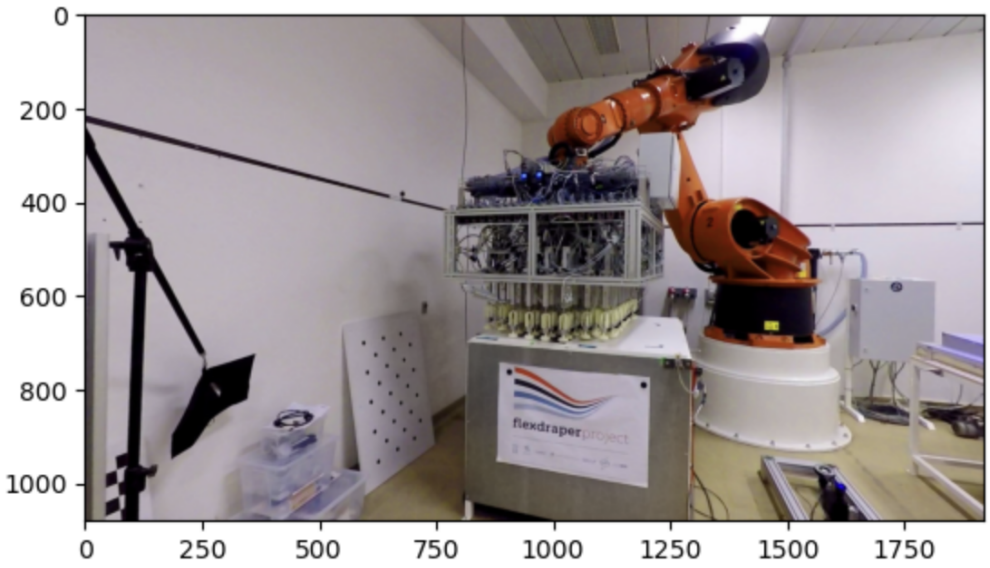

Figure 4: Solution to Exercise 2.4

1.5 Exercise 2.10

Here is an example for the object from two viewpoints, with the four ×-marks. (Our clicks are also indicated by the red dots.)

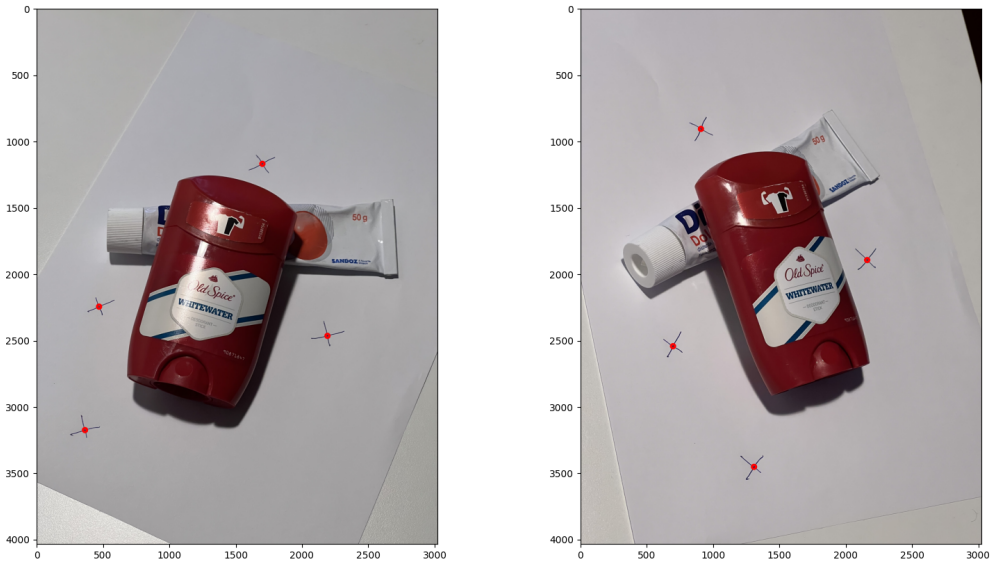

Figure 5: Example to Exercise 2.10

1.6 Exercise 2.11

Here you can see the re-created version of image A, using the estimated homography and the pixel intensities from image B.

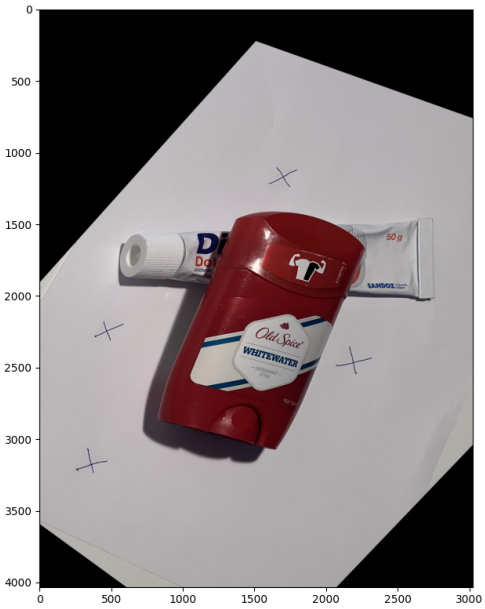

Figure 6: Example solution to Exercise 2.11