

Home assignment #5

Home assignment 5:

- 1) Take/print a chessboard and record a dataset with some photos of different positions relatively to a camera (a camera with switched off auto-focusing mode); Calibrate the camera using Numpy and OpenCV and store the intrinsic and extrinsic parameters
- 2) Place a round flat object (e.g. a coin/ a card/ a magnet) on the checkerboard, take a photo and use filters and edge detectors (Canny/Sobel, blurring, dilatation and erosion) to get the clear object's boundaries. Estimate the object's dimensions, and check it by a ruler. Compute the distance between the camera plane and the selected object.

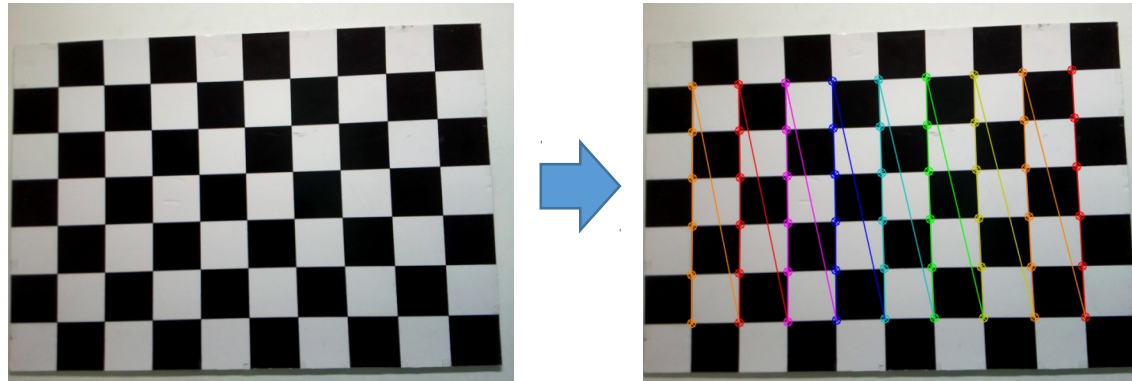


Fig. © Camera Calibration using OpenCV, LearnOpenCV, 2022, <https://learnopencv.com/camera-calibration-using-opencv/>