

Assignment#3: Camera Calibration

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1 Code Description

I divided the code for this assignment into three parts. The first Python script is a simple image capture script that uses keyboard commands to gather the chessboard pattern images for calibration. The second script recognizes the checkerboard pattern's square corners and calculates the distances between them for calibration. Using the `JSON dump()` function, I record the pixel matrix values for the image pixel matrix and distance matrix. I also record the other values for thoroughness: the `ret`, rotation vector, and translation vector. The last script loads image matrix and distance values, converts them to a numpy array, and then undistorts the image using these parameters and the `undistort()` function.