

Assignment 3.1

Read and understand the papers from Zhang and Heikkil (provided in LEA). Based on your understanding of camera calibration, design a calibration setup and detail the actual calibration process.

Test the provided camera on your laptop and ensure you can capture still images.

Deliverables 3.1

Write a design report describing the calibration process, including a theoretical part that describes the camera and lens errors measured and corrected by the calibration. Your design report should cover:

1. A description of the setup for calibration, including possible pitfalls.
2. An estimation of the number of images and image positions required.
3. a description of the parameters (what do they mean?) calculated by the Matlab calibration toolbox.
4. Discuss possible problems or error sources that can disturb the calibration process. Include any observation you may have made while testing the proper functioning of the camera with your laptop.