Instructions for how to use this `polarimetryLab` program

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1 Introduction

This program computes polarimetry images.

Outline The program takes the six filtered images (i.e. anti-diagonal, vertical, diagonal, horizontal, lefthand circular, and righthand circular) and produces five polarization images that describe the RGB, intensity, degree of linear polarization, angle of polarization, and degree of circular polarization.

2 Running the program

1. Photograph your subject through the following filters in the following order: anti-diagonal, vertical, diagonal, horizontal, and if you want circular polarization as well: lefthand circular, and righthand circular (see Section 3 for detailed instructions for how to shoot these images).

2. Put (copy/move) these images in the folder `raw`, making sure you have only 4 or 6 images (depending if you want circular polarization or not) in the `raw` folder.

3. Double click the icon .

4. Wait for the "Done" message.

5. The polarimetry images are now in the folder `polarimetry`.

6. Take (copy/move) the resulting images from the `polarimetry` folder because any subsequent runs will erase anything in the `polarimetry` folder.

3   Photographing

For the best results use the D300 Nikon with the filter rings attached to the lens.