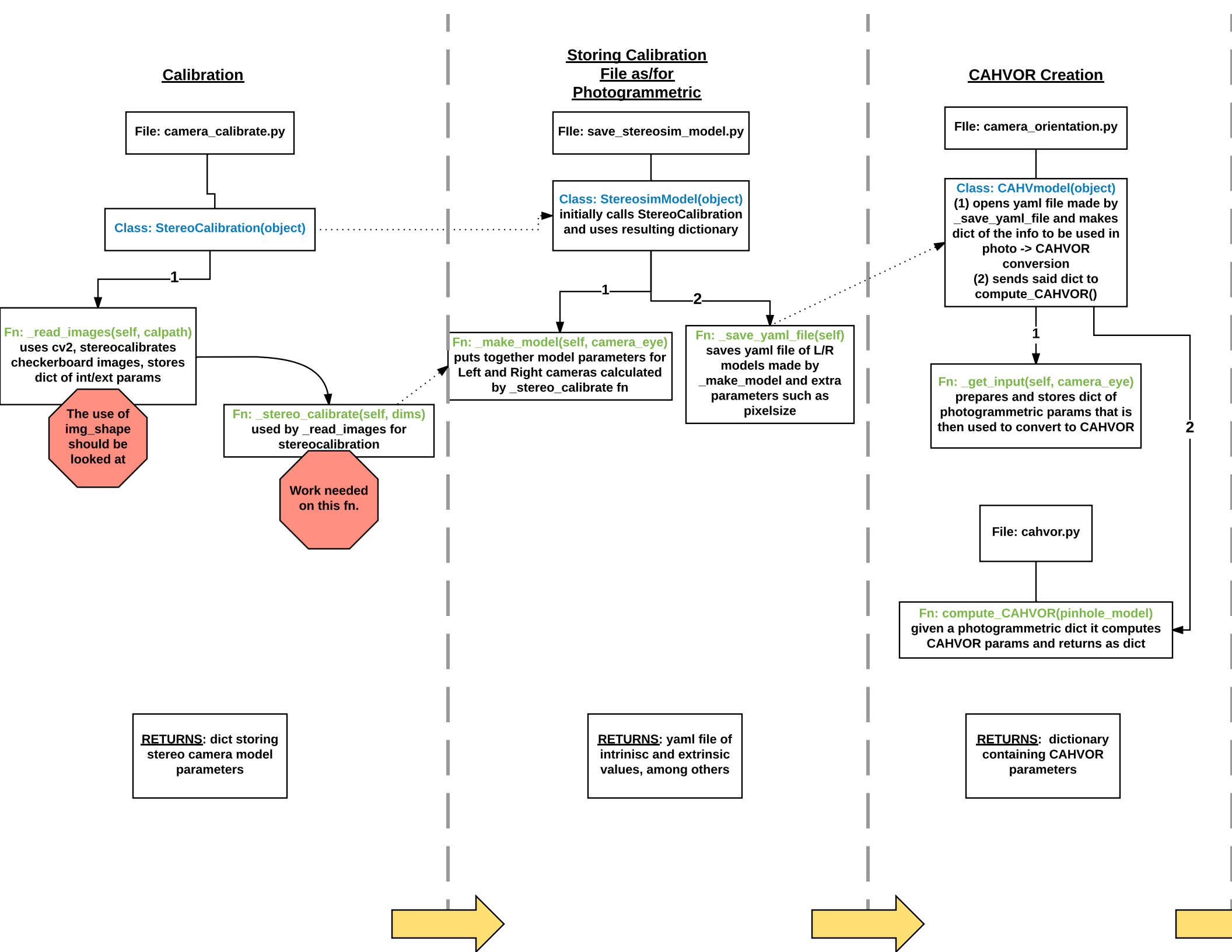
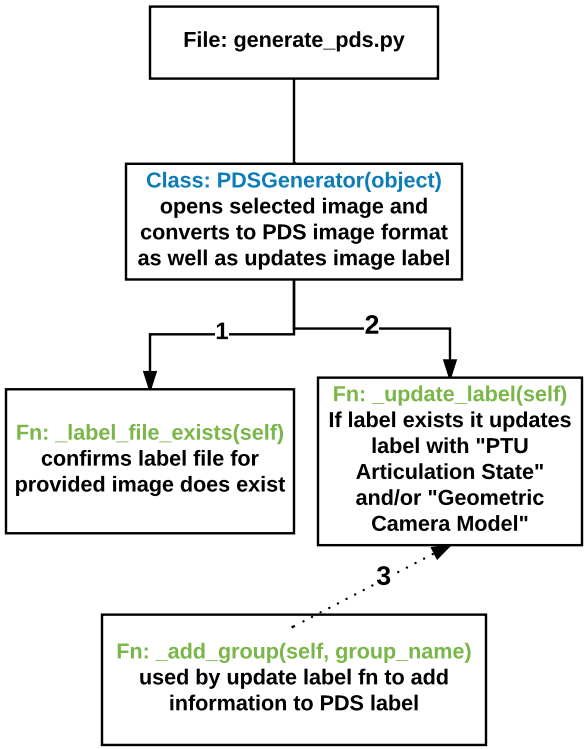

Calibration
File: camera_calibrate.py
Class: StereoCalibration(object)
1
Fn: _read_images(self, calpath)
uses cv2, stereocalibrates checkerboard images, stores dict of int/ext params
The use of img_shape should be looked at
Fn: _stereo_calibrate(self, dims)
used by _read_images for stereocalibration
Work needed on this fn.
RETURNS: dict storing stereo camera model parameters
Storing Calibration File as/for Photogrammetric
FIle: save_stereosim_model.py
Class: StereosimModel(object)
initially calls StereoCalibration and uses resulting dictionary
1
2
Fn: _make_model(self, camera_eye)
puts together model parameters for Left and Right cameras calculated by _stereo_calibrate fn
Fn: _save_yaml_file(self)
saves yaml file of L/R models made by _make_model and extra parameters such as pixelsize
RETURNS: yaml file of intrinisc and extrinsic values, among others
CAHVOR Creation
FIle: camera_orientation.py
Class: CAHVmodel(object)
(1) opens yaml file made by _save_yaml_file and makes dict of the info to be used in photo -> CAHVOR conversion
(2) sends said dict to compute_CAHVOR()
1
2
Fn: _get_input(self, camera_eye)
prepares and stores dict of photogrammetric params that is then used to convert to CAHVOR
File: cahvor.py
Fn: compute_CAHVOR(pinhole_model)
given a photogrammetric dict it computes CAHVOR params and returns as dict
RETURNS: dictionary containing CAHVOR parameters

PDS Generation