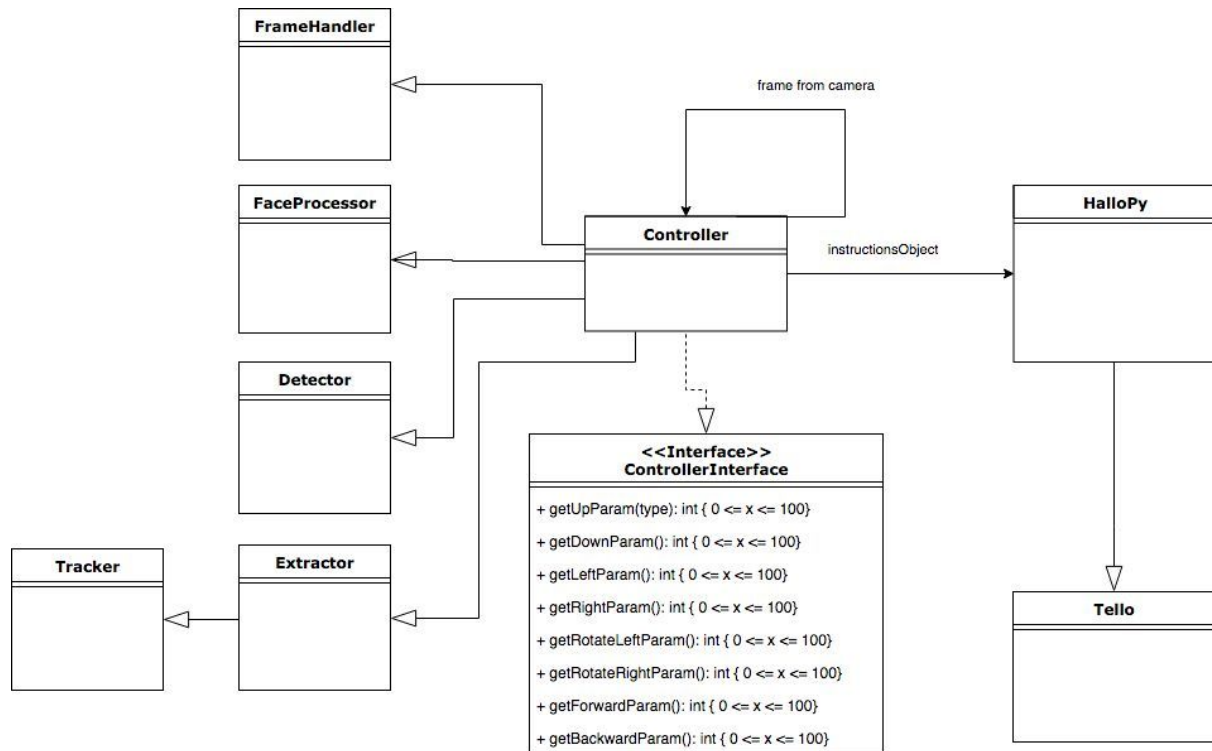# Hallo - a hand controlled DJI TELLO.

Projects architecture.

Hand detection & features extraction algorithm.

My algorithm contains a series of small image processing elements in a pipeline:

1. Frame_handler, receives a frame, performs some smothings on it and draws the relevant ROI
2. Face_processor, detects and draw in black all faces in the frame (using Haar Cascade), so there will be no noise when it comes to hand detecting.
3. Background_remover, using opencv *createBackgroundSubtractorMOG2* we subtract background and pass frame's foreground to Detector.
4. Detector, receives foreground and find its largest contour (i.e hands contour).
5. Extractor receives a detector, and from its contour, we extracts:
    a. center of mass
    b. contour extreme points
    c. palms angle
6. a Tracker is used within Extractor, to track contour_extreme_points, once my algorithm is CALIBRATED.