

Step 1: Measure

Step 2: Find

Step 3: Calculate number of pixels per degree

Step 4: Calculate , which is

Step 5: Calculate (pitch of the camera),which is

Step 6: Calculate (yaw of the camera), which is

Step 7: Calculate for each camera

Step 8: Cameras are now calibrated

Step 9: Retrieve object coordinate from camera

Step 10: Translate the coordinate by , which will align the images origin to the world origin.

Step 11: Perform rotation of the image about the Y-axis with and about the X-axis with

Step 12: Apply projection matrix with d to be determined experimentally

Step 13: Combine data to determine object location by using X-coordinate of Camera 1 and -X-coordinate of Camera 4 as the objects world X-coordinate, and the X-coordinate of Camera 2 and the -X-coordinate of Camera 3 as the objects world Z-coordinate.