

(a) source image



(c) rectified image cropped



(b) rectified image

The above is an example of an image I took, using the fence as a plane for correspondence points. The rectified image plane is in line with the plane that the fence spans. Changing these points can change the entire plane of the image, for better or for worse. Another example using the plane of the building behind the fence is represented in (d).



(d) rectified image w/ building plane

Next is compositing an image into another image using a mask. This requires warping the new image onto the plane of the mask.



The images (e) and (g) were both pictures I took. I composited (g) into (e) using a greyscale mask (f) that I created in photoshop. White where I want the new image, and black where I want to keep the original target image. To warp the source image, the homography from the target points to the source points was used. The target points I used were the 4 corners of the white box in the mask, which is just the corners of the calendar. This gave me a good plane to work with. I wasn't sure how a tall image like (g) would work with a mask that is square. However, the result still computed correctly. It appears the result image is stretched out a bit in the horizontal direction, but without knowing what the original source image is supposed to be, it looks pretty good.