Computer Vision
CS376

Pset3

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Using This Code

To use the code we need to firs choose corresponding points between the first and second images. Calling the function

get_coords(img1, img2) will return these points. The user may specify any number of correspondence points so long as there at least

four. We then compute the homography, compute_homography(coords), and then apply it to the images, warp(H, img1, img2).

Example:

```
img1 = imread('uttower1.JPG');
img2 = imread('uttower2.JPG');
coords = get_coords(img1, img2);
H = compute_homography(coords);
warp1 = warp(H, img1, img2);
imshow(warp1);
```

We can also double check our homography matrix before applying it by using the verify_points(H, coords, img2) function. This function will display the points (coords) chosen to create the homography matrix. As a final check, the function pick_n_apply(H, img1, img2) will allow the use to pick additional points and have them translated over using H.

Results

UT Tower Composition

Composition of Three images of Petra (Personal Photos)

Same Composition But Different Ordering When Applying Warp()

Women Enjoying An Art Gallery (courtesy: http://www.manhattancvb.org/index.aspx?NID=66)

A New Masterpiece Has Been Added

Extra Credit

Artwork On The Floor

(courtesy:

http://www.lifeinthearts.com/Suminagashi-LITA-Nov1999.html)

The Artwork Rectified