

CS376
David T. Kraft-Ishihama
Pset3

Name: David T. Kraft-Ishihama
CS user ID: dtkraft
CS 376 – Computer Vision
pset3.pdf

1. [15 pts] Apply your system to the provided pair of images, and display the output mosaic.

Input images:



uttower1.jpg



uttower2.jpg

Output image:



result1.JPG

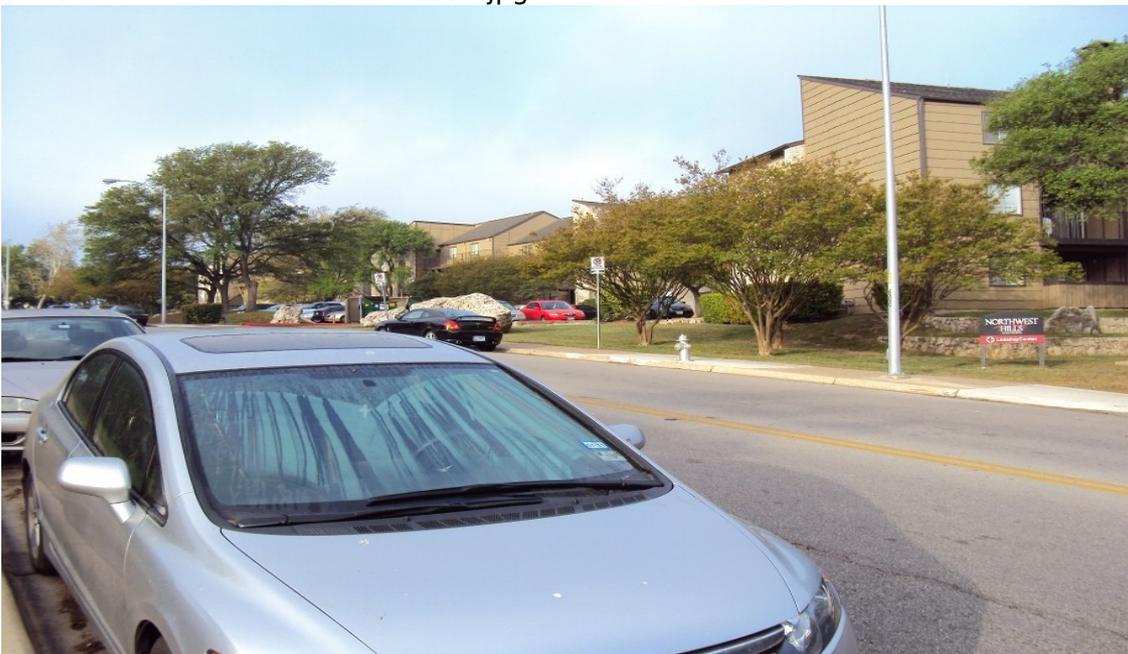
In general this looks quite good, although you may notice a few mismatches, particularly around the fountain. This should be attributed to the inaccuracy of mouse-clicks. I clicked on the following points:

- Lower-left corner of the post on the left-side of the path
- Upper-right corner of the same post
- Upper-left corner of the leftmost window on the red roof
- Lower-right corner of the window second from the left on the red roof

2. [20 pts] Show one additional example of a mosaic you create using images that you have taken. You might make a mosaic from two or more images of a broad scene that requires a wide angle view to see well. Or, make a mosaic using two images from the same room where the same person appears in both.

Images I took:

Road1.jpg



Road2.jpg



I clicked the following points:

- The corner where the dark roof meets the gray beam
- The upper-left corner of the upper window
- The lower-right corner of the middle window
- The lower-right corner of the Northwest Hills sign

This gave me this output:



result2.JPG

It matches fairly well, though again it's slightly off. This is attributed both to the inaccuracy of the mouse-clicks as well as the inexperience of the photographer (myself).

3. [15 pts] Warp one image into a "frame" region in the second image. To do this, let the points from the one view be the corners of the image you want to insert in the frame, and the let the corresponding points in the second view be the clicked points of the frame (rectangle) into which the first image should be warped. Use this idea to replace one surface in an image with an image of something else. For example -- overwrite a billboard with a picture of your dog, or project a drawing from one image onto the street in another image, or replace a portrait on the wall with someone else's face, or paste a Powerpoint slide onto a movie screen, ...

For this I took a picture of my fireplace at an angle:



fireplace.JPG

For the second image I took the fish picture from pset2:



fish.JPG

Here are the results:



result3.JPG

This looks to me like a perfect warp. I don't think this can get any better.