Problem Set 4

Ravish Hastantram – rh22922

Computing the Homography parameters:

- Four corresponding points are chosen from two images.
- The Homography matrix is obtained by solving for the equation AH = B.

Warping between the image planes.

- Using the H matrix from above, the source image is transformed into the destination image space.
- The points marked in 'red' represent the original image points selected by the user.
- The points marked in 'blue' represent the points obtained by applying the Homography matrix on the source image points.

Select corresponding4 points
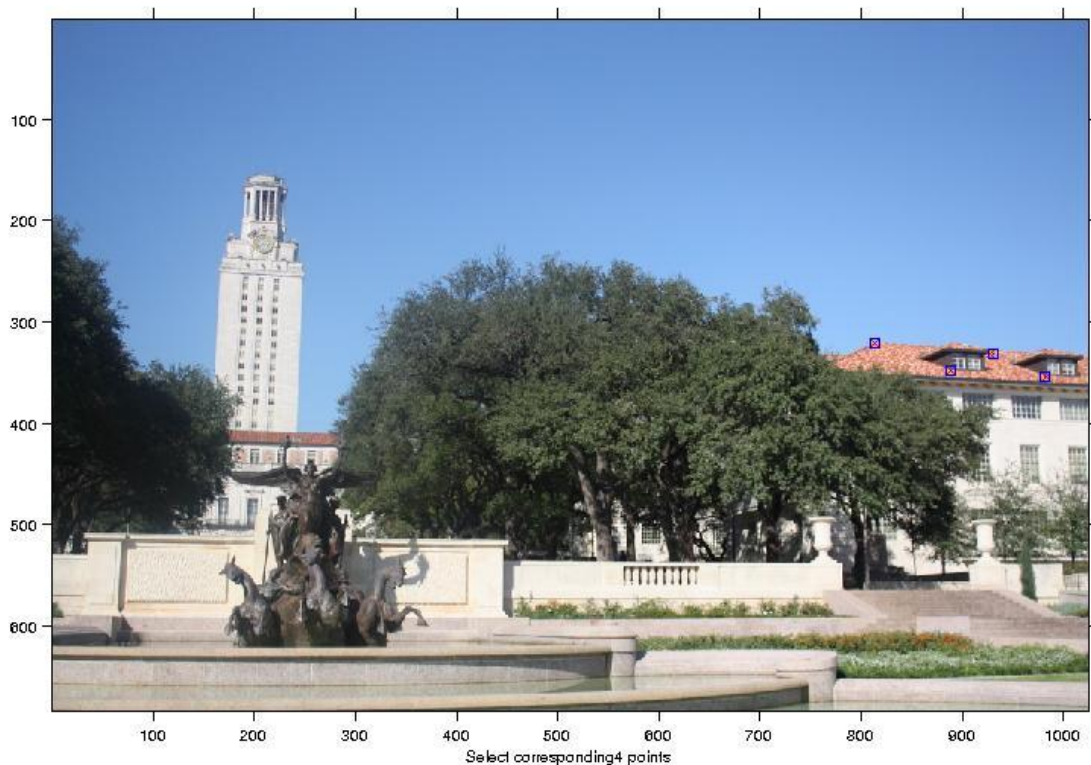
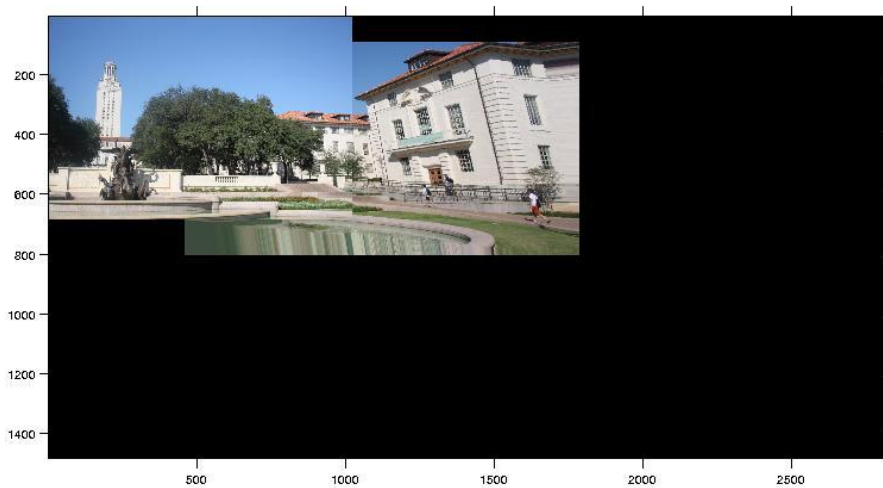**Creating the output mosaic.**

- The transformed source image is then overlaid with the destination image to from the mosaic.

a) Source Image.
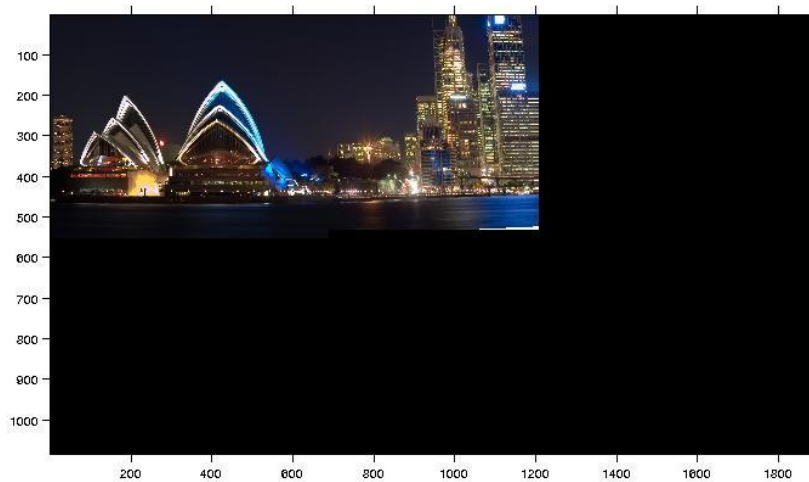

b) Destination Image

c) Image mosaic.

Additional Example of mosaic.

a) Source Image

b) Destination Image

c) Final Image Mosaic.

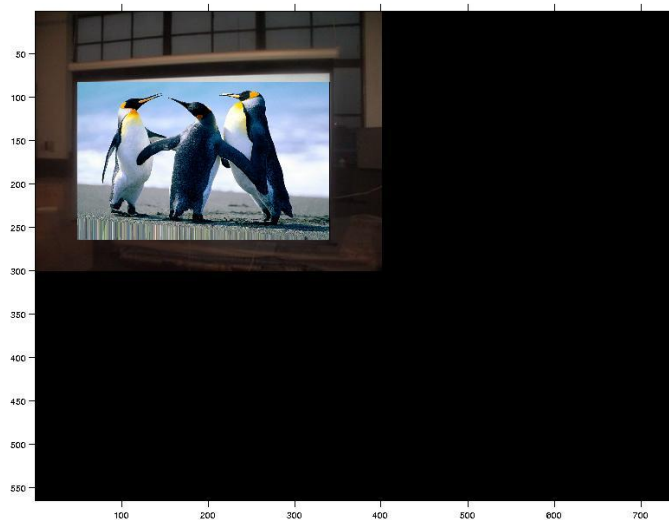Image Source: http://en.wikipedia.org/wiki/File:Sydney_Harbour_Bridge_night.jpg

Warp one image into "frame" region in the second image.

a) Original Image

b) Destination Frame

c) Original image projected onto Destination Frame

Image Source: http://www.sz-wholesale.com/Search-Result/overhead-projector-screen/