

Hien Dao

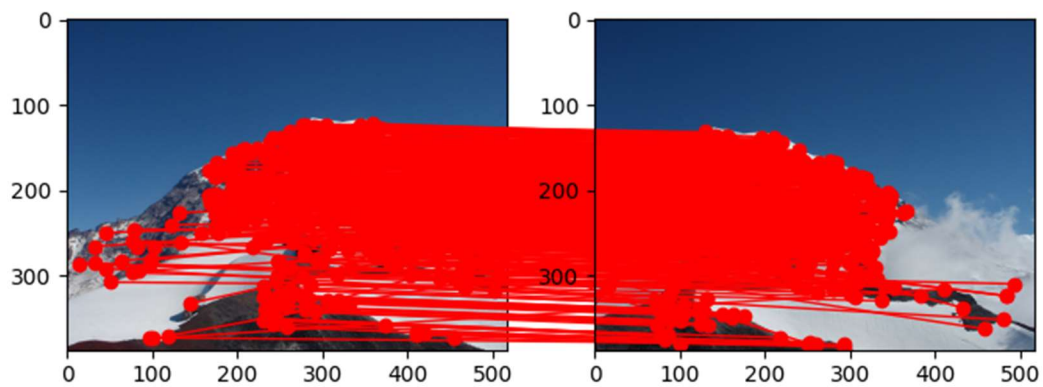
CSE 4310-001

## Image Stitching with SIFT and RANSAC

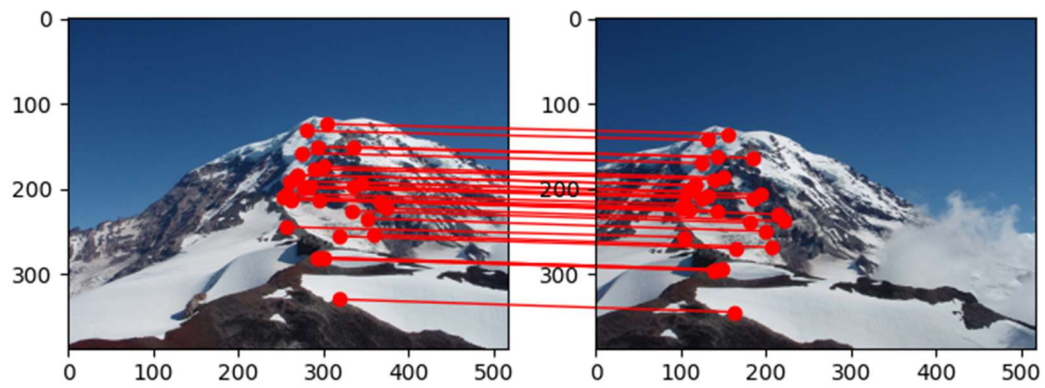
### Rainier

#### Affine Transformation Model

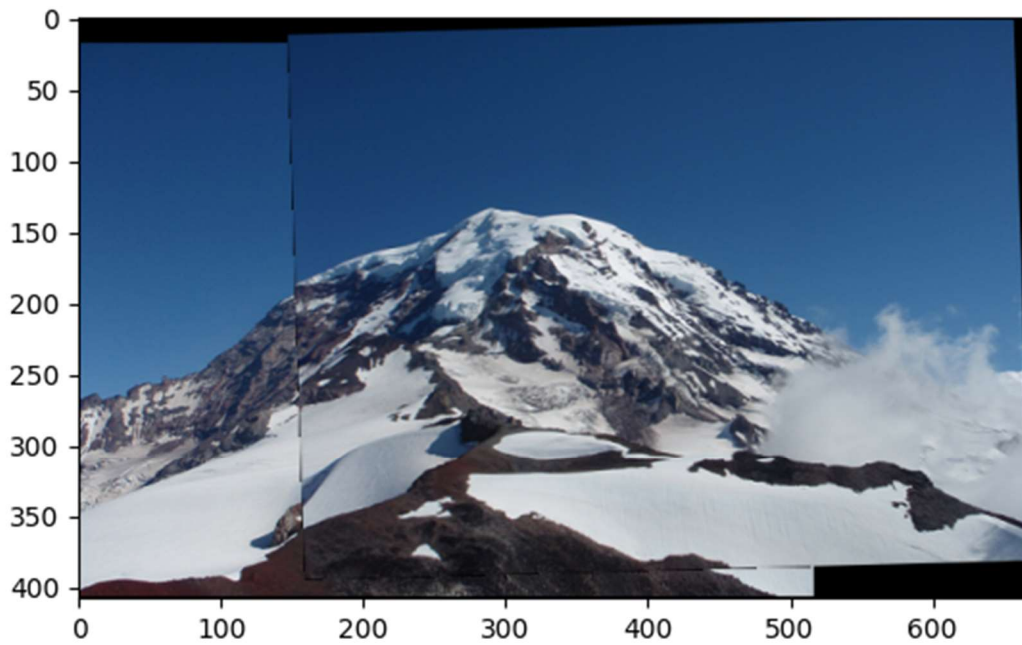
Computing the key points between both images before RANSAC had 618 key point matches.



RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 30.

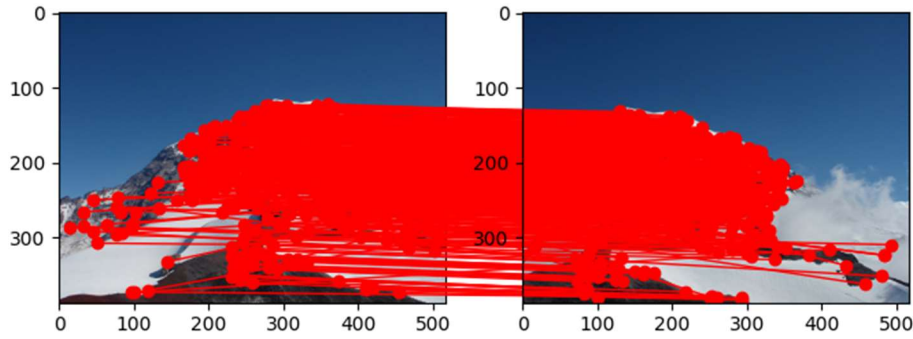


The images were then stitched together following the best fit affine transformation model.

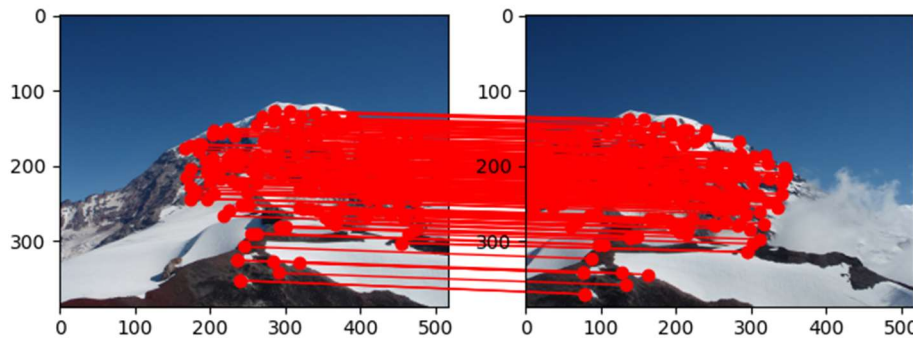


## Projective Transformation Model

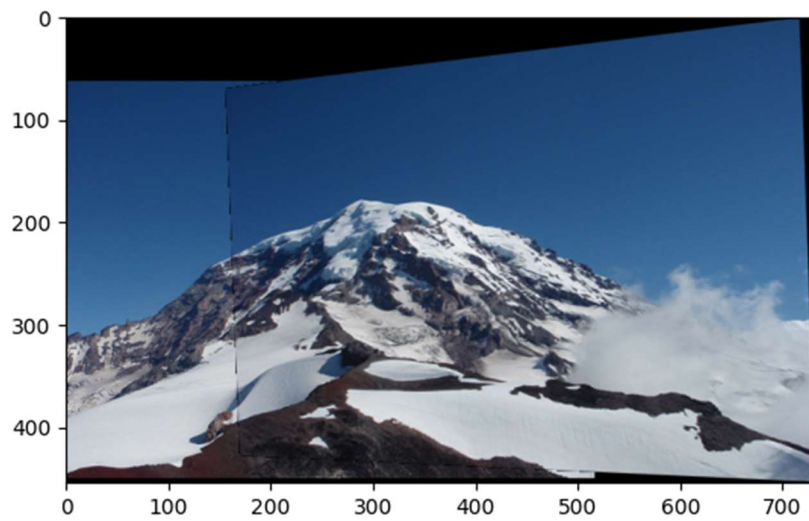
Computing the key points between both images before RANSAC had 618 key point matches.



RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 219.



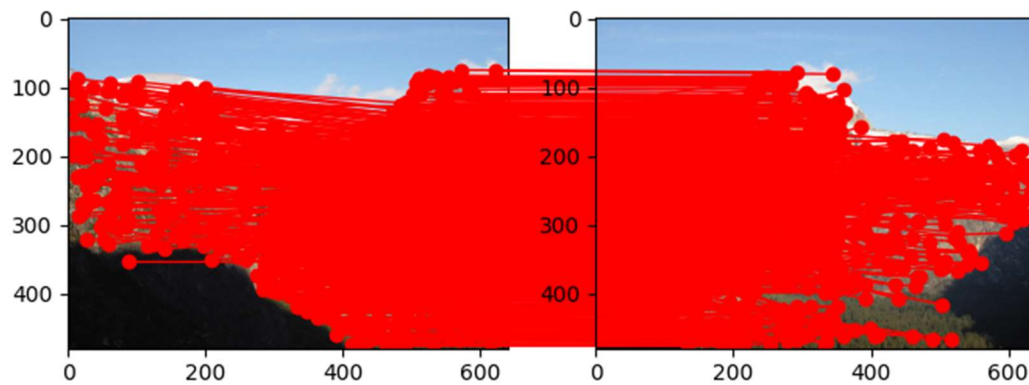
The images were then stitched together following the best fit projective transformation model.



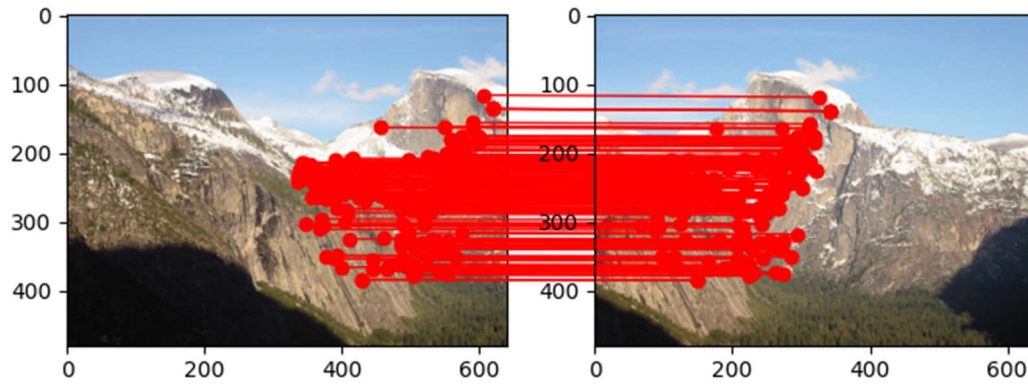
## Yosemite

### Affine Transformation Model

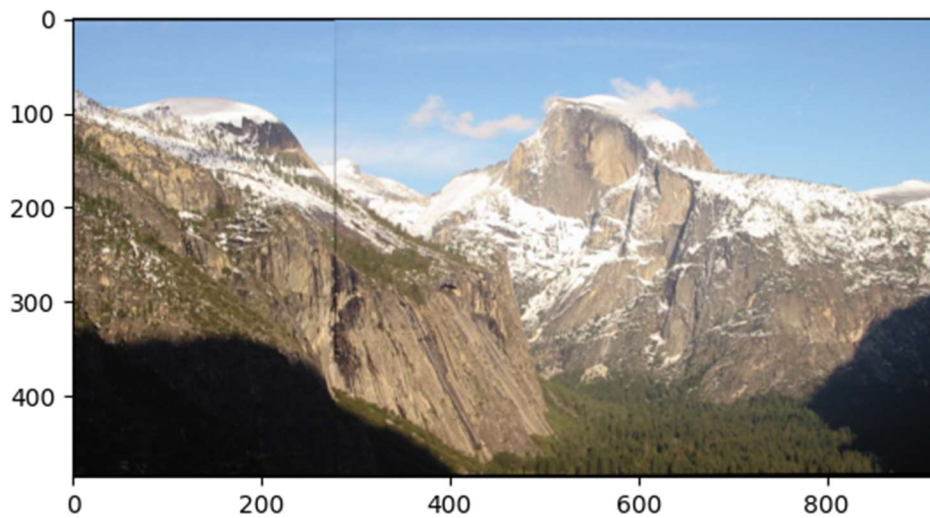
Computing the key points between both images before RANSAC had 1485 key point matches.



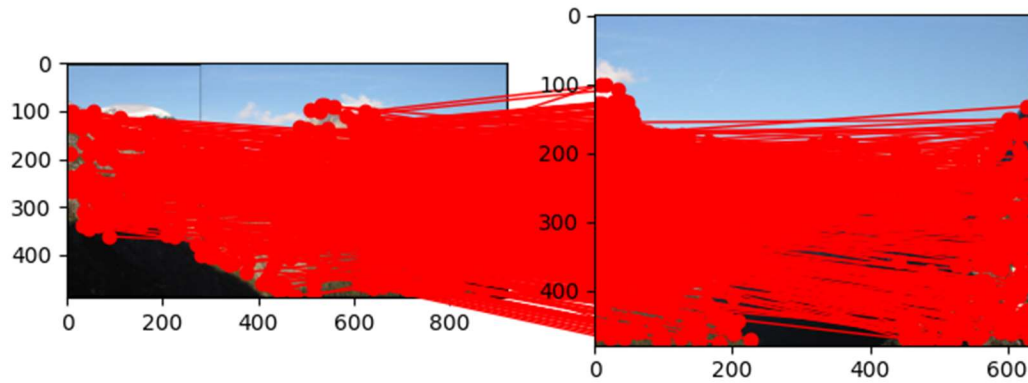
RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 207.



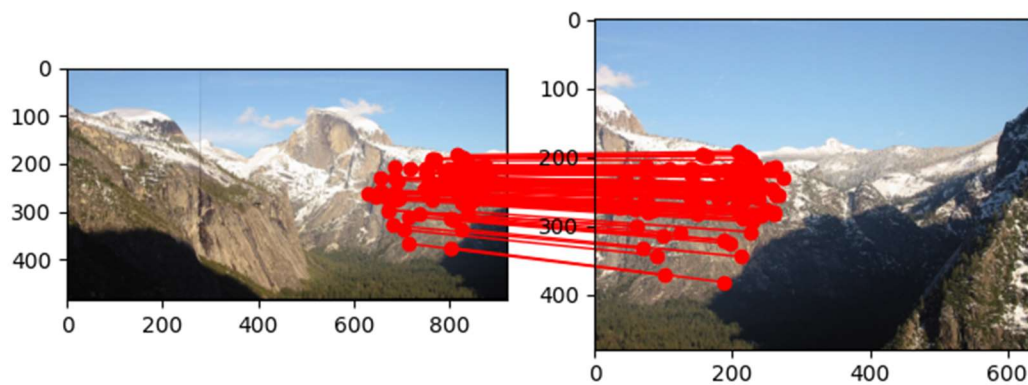
The images were then stitched together following the best fit affine transformation model.



Computing the key points between both images before RANSAC had 1314 key point matches.

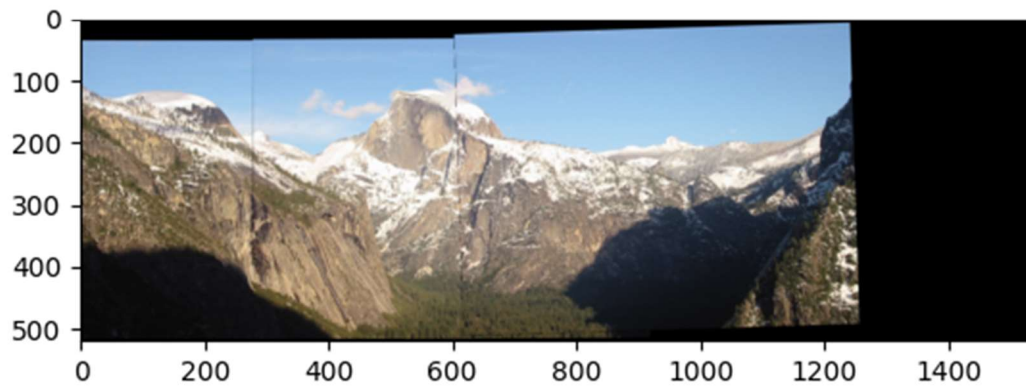


RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 119.

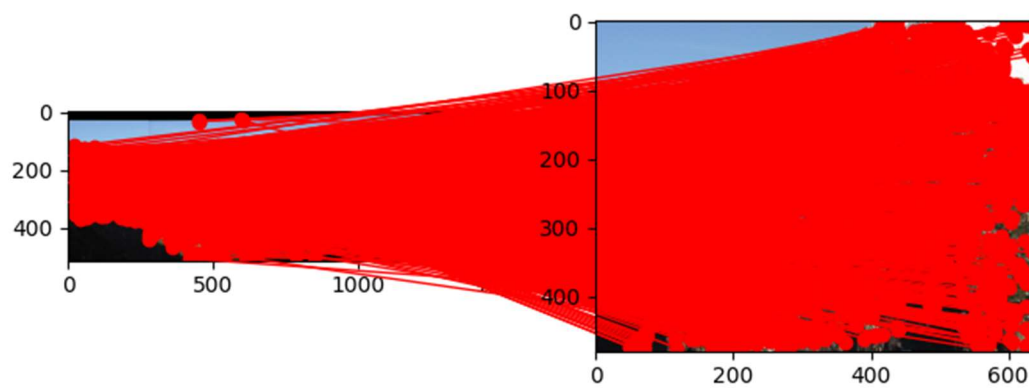


The images were then stitched together following the best fit affine transformation model.

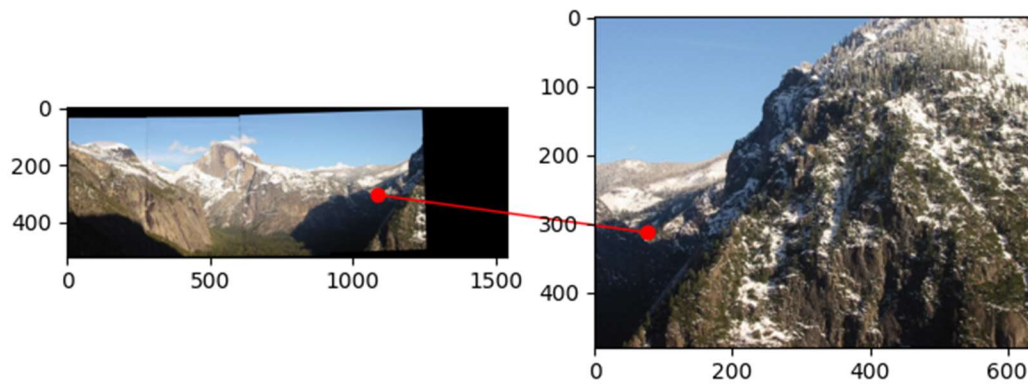




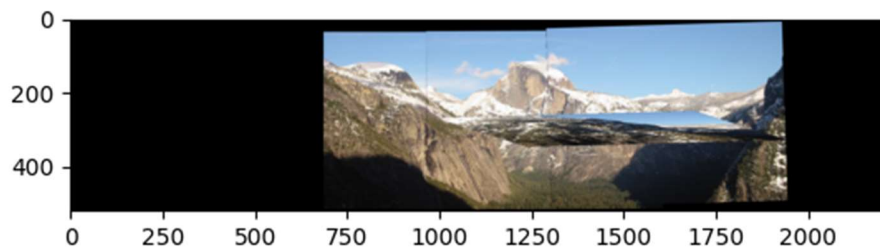
Computing the key points between both images before RANSAC had 1800 key point matches.



RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 1.



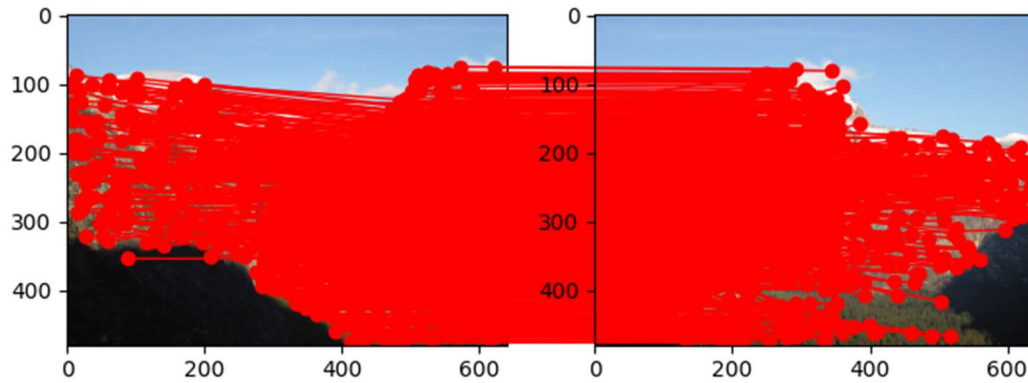
The images were then stitched together following the best fit affine transformation model.



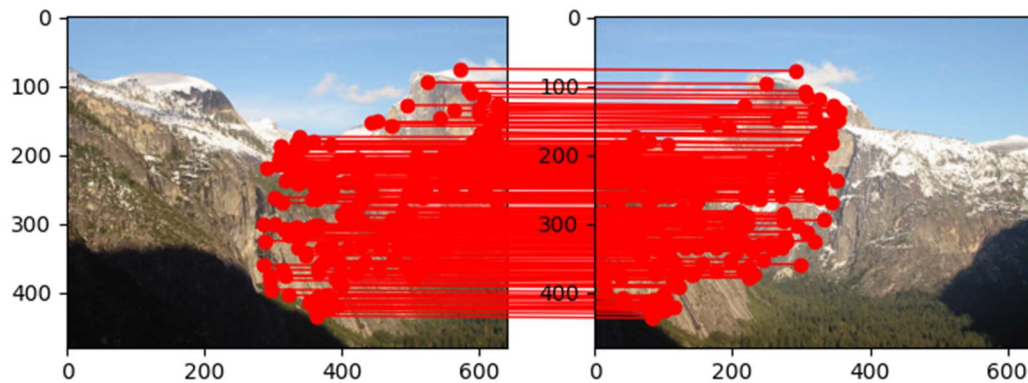


## Projective Transformation Model

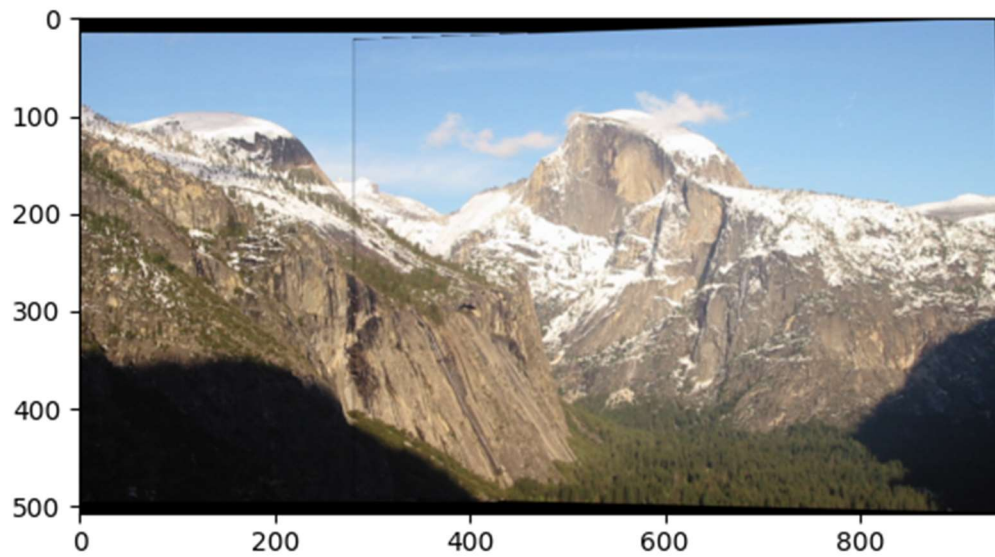
Computing the key points between both images before RANSAC had 1485 key point matches.



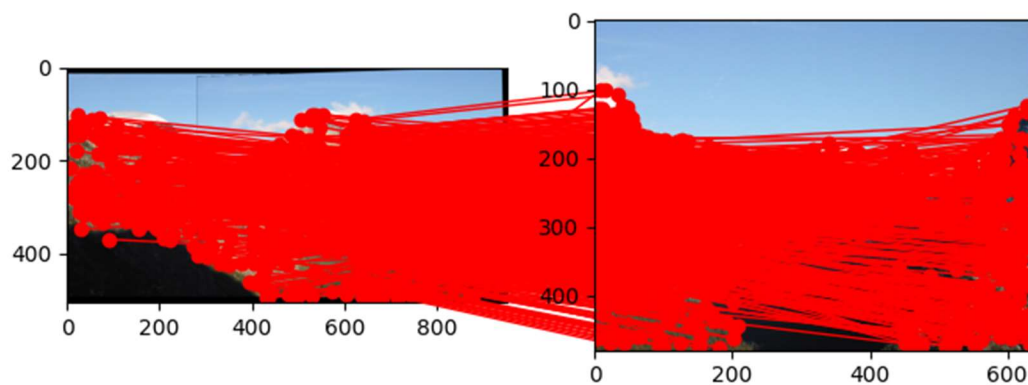
RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 313.



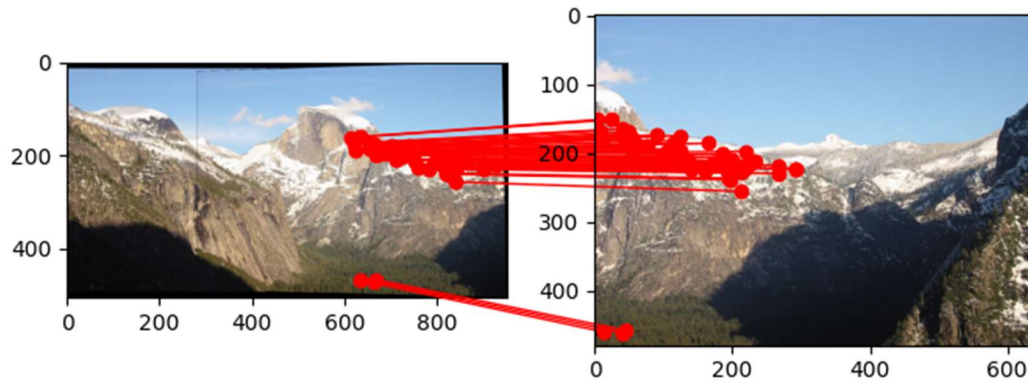
The images were then stitched together following the best fit projective transformation model.



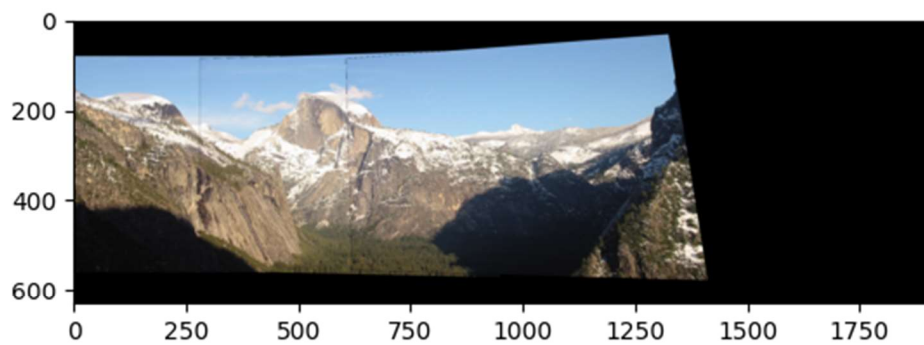
Computing the key points between both images before RANSAC had 1371 key point matches.



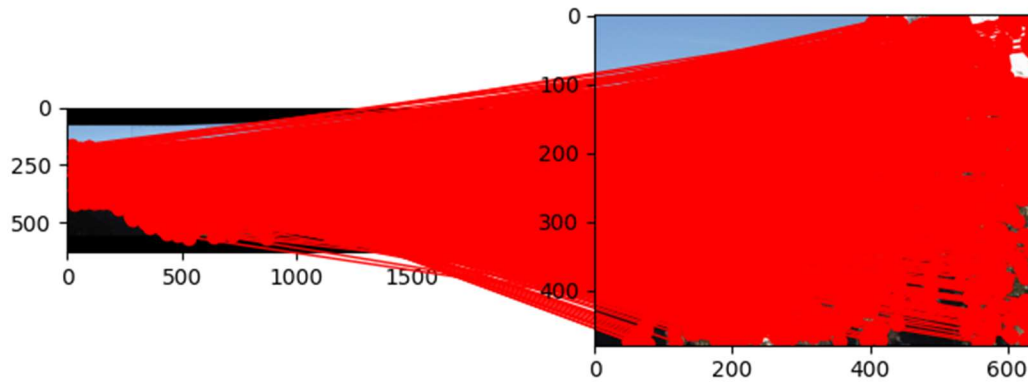
RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 51.



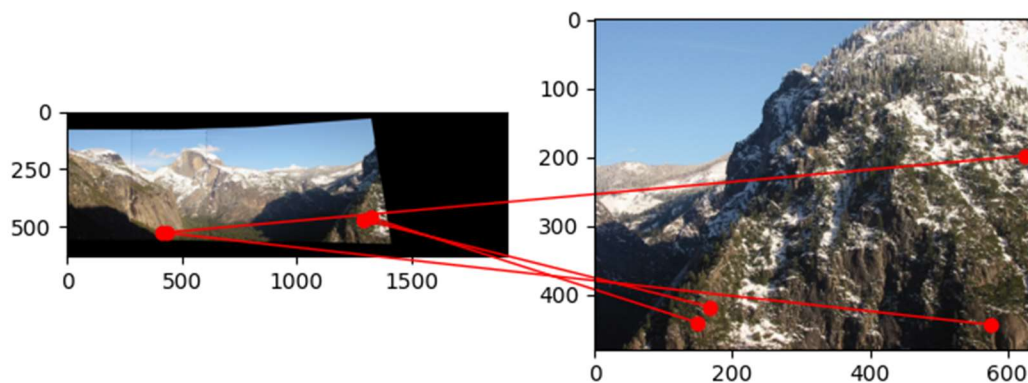
The images were then stitched together following the best fit projective transformation model.



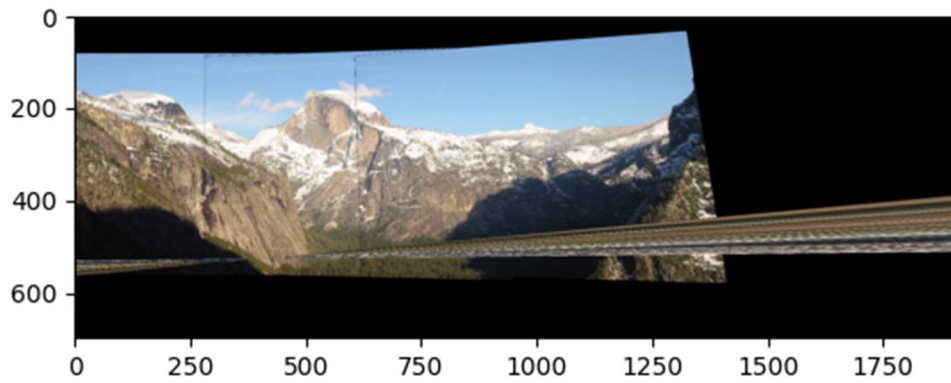
Computing the key points between both images before RANSAC had 1878 key point matches.



RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 4.



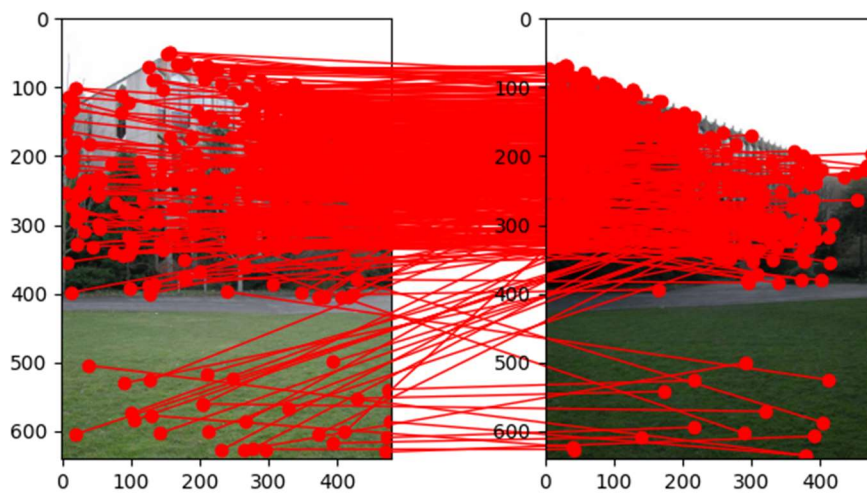
The images were then stitched together following the best fit projective transformation model.



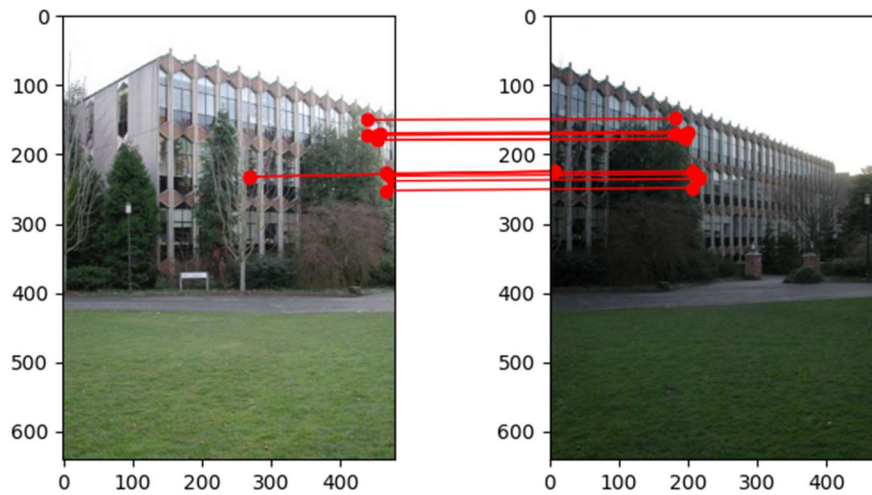
## Campus

### Affine Transformation Model

Computing the key points between both images before RANSAC had 837 key point matches.

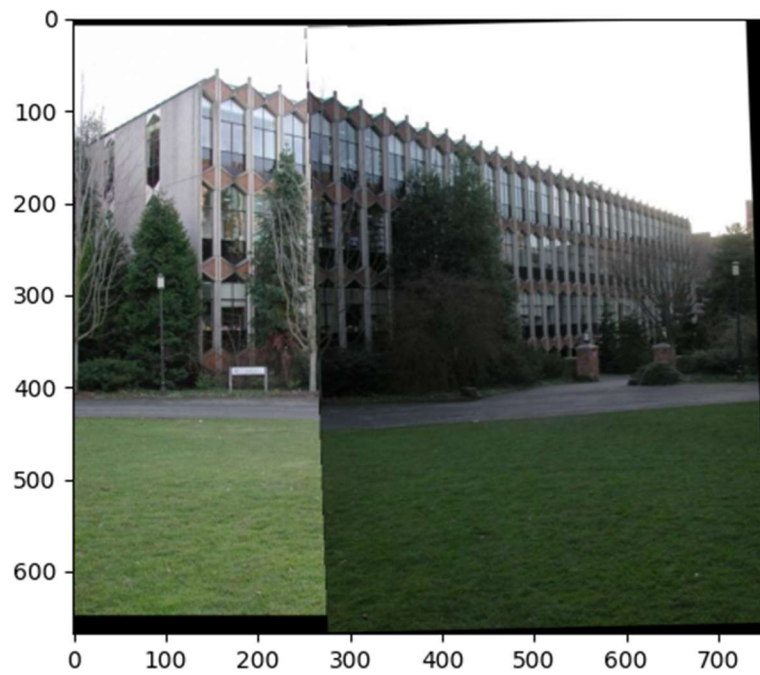


RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 17.

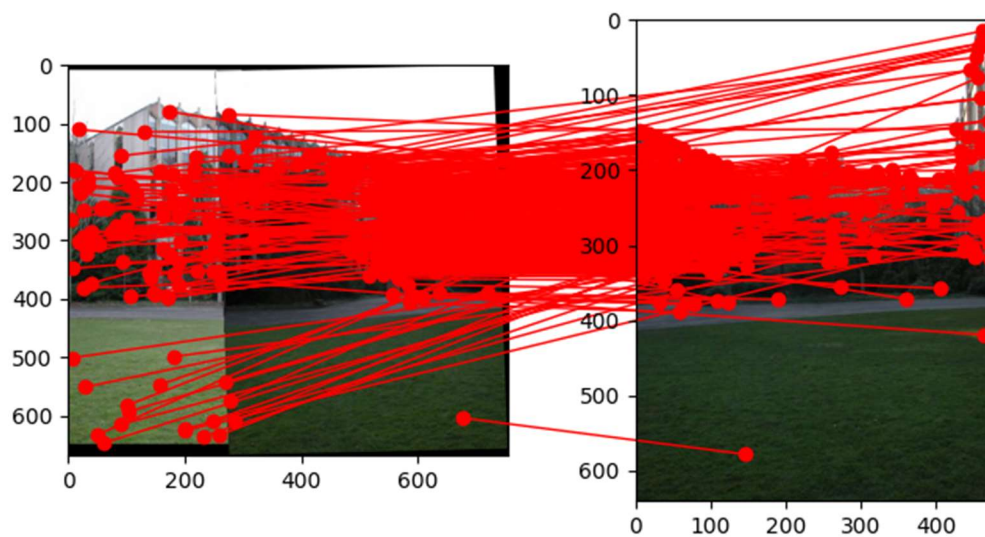


The images were then stitched together following the best fit affine transformation model.

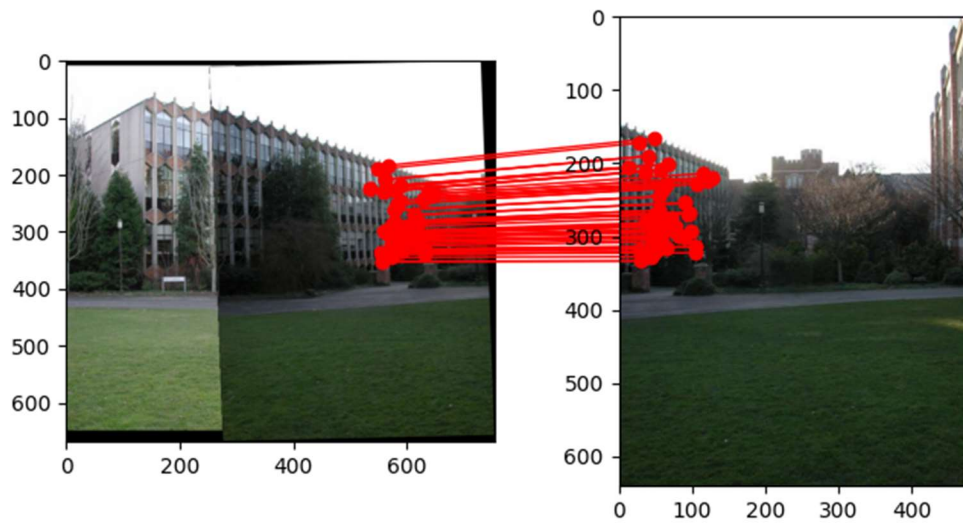




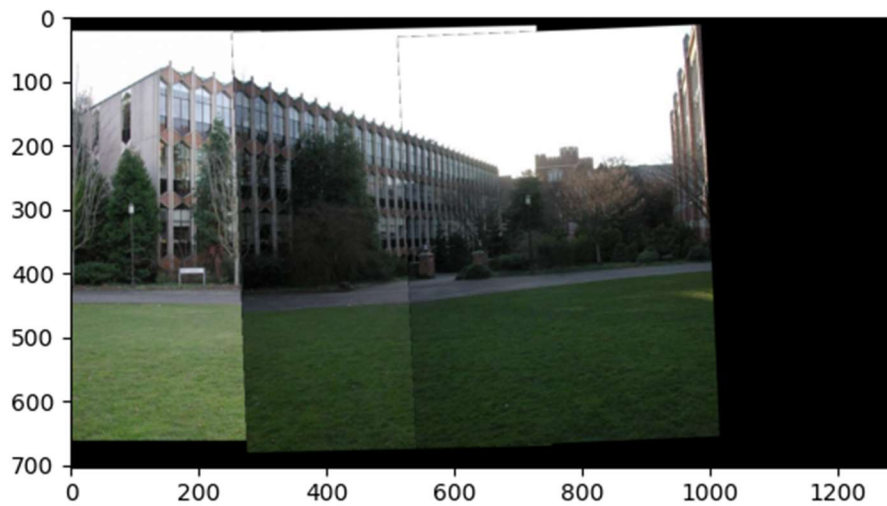
Computing the key points between both images before RANSAC had 380 key point matches.



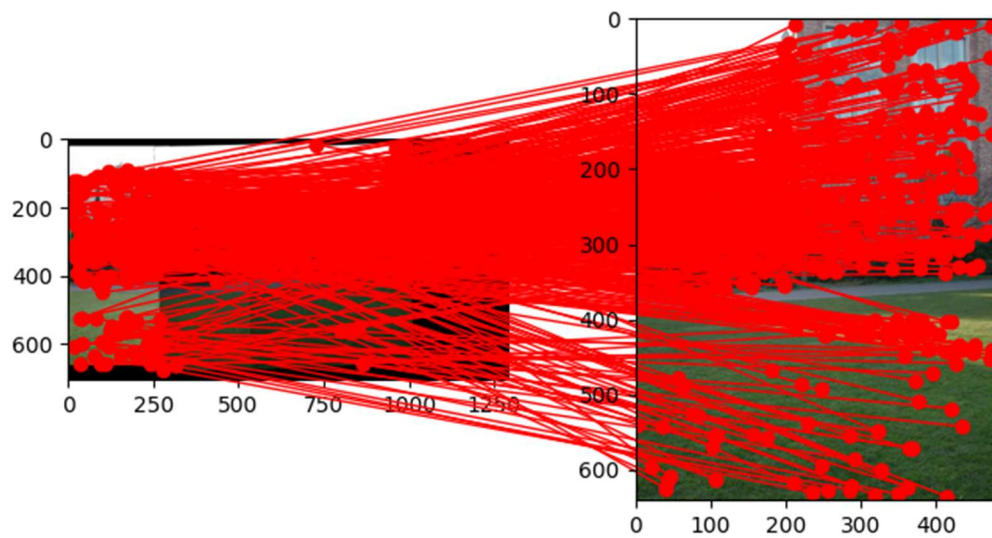
RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 45.



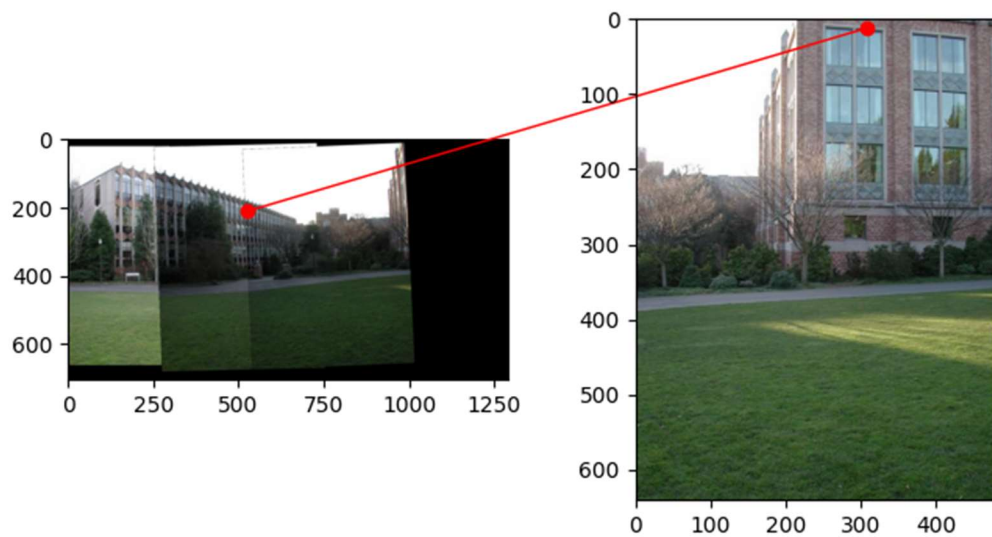
The images were then stitched together following the best fit affine transformation model.



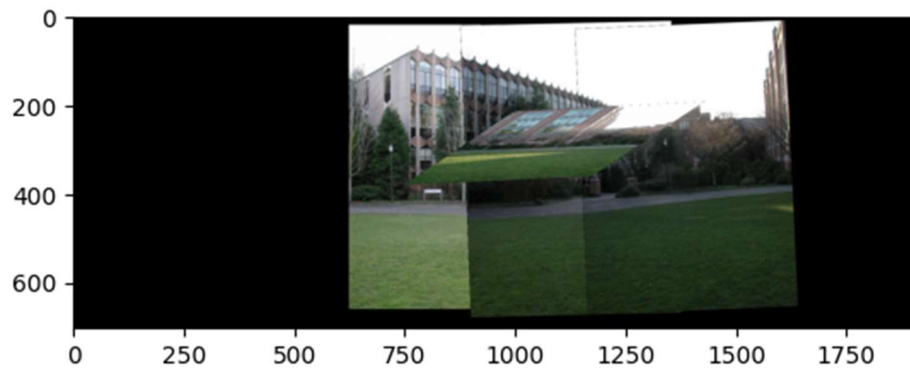
Computing the key points between both images before RANSAC had 380 key point matches.



RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 45.

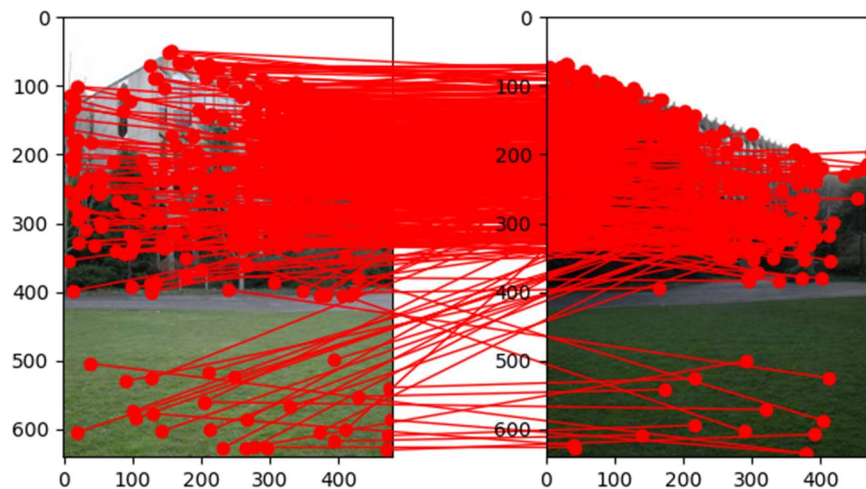


The images were then stitched together following the best fit affine transformation model.



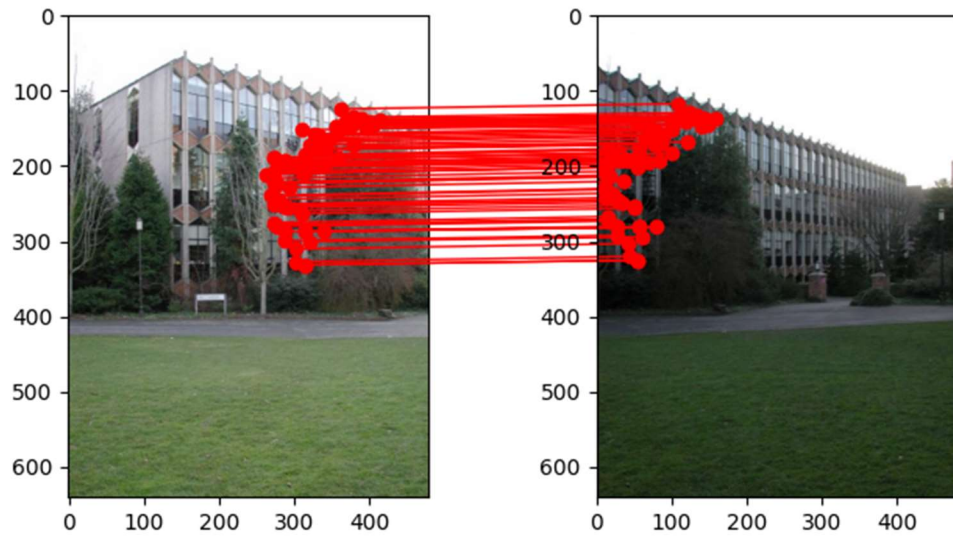
## Projective Transformation Model

Computing the key points between both images before RANSAC had 490 key point matches.

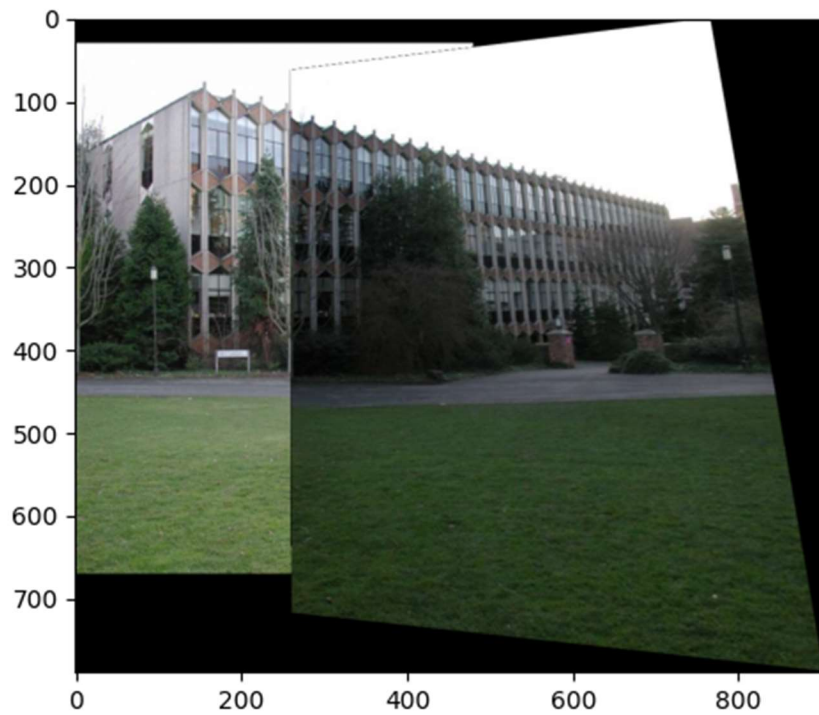




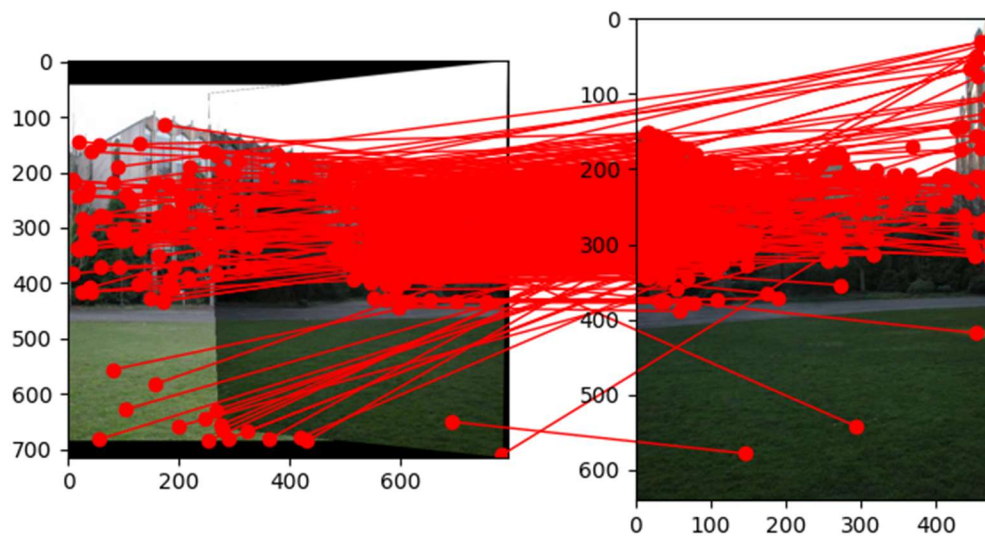
RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 73.



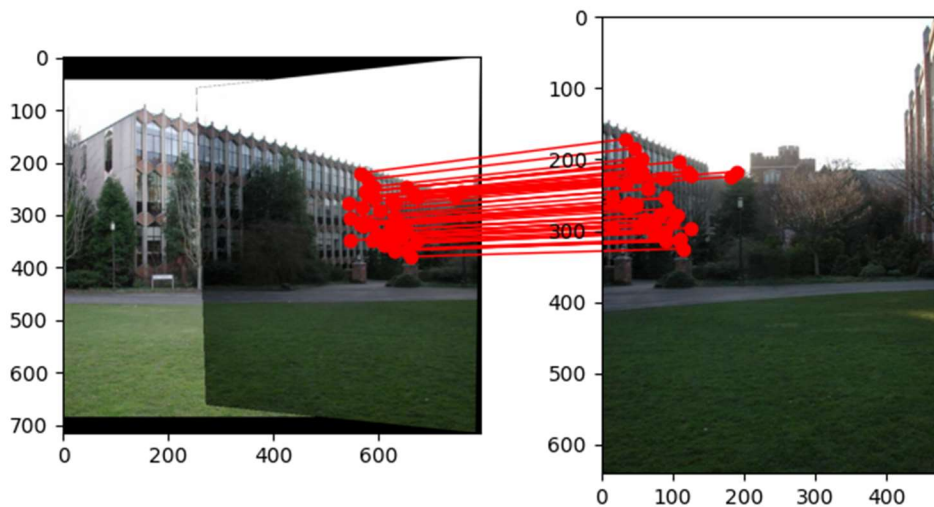
The images were then stitched together following the best fit projective transformation model.



Computing the key points between both images before RANSAC had 490 key point matches.

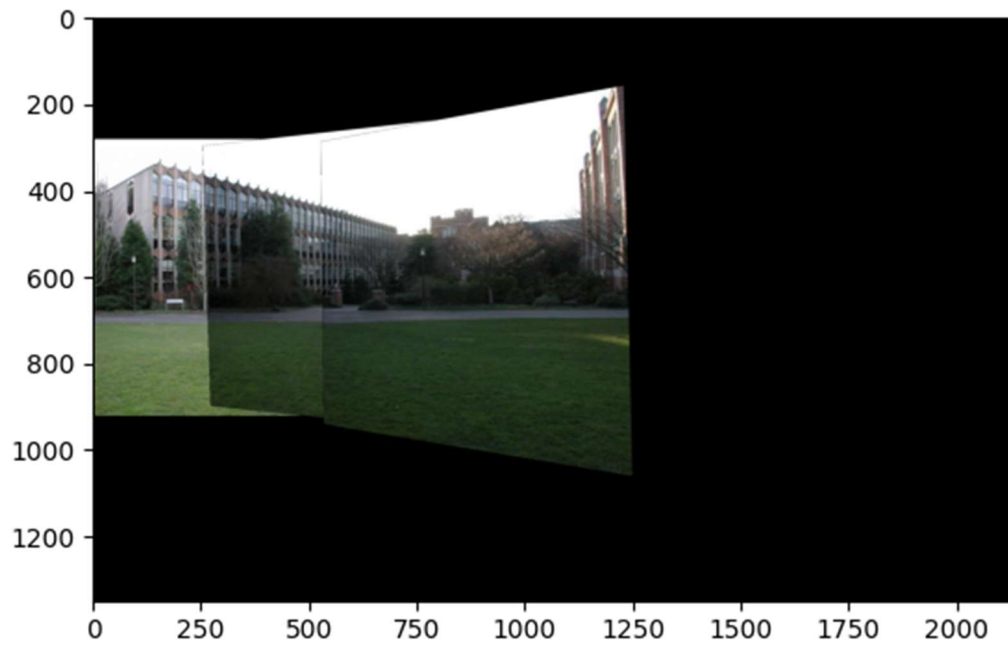


RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 57.

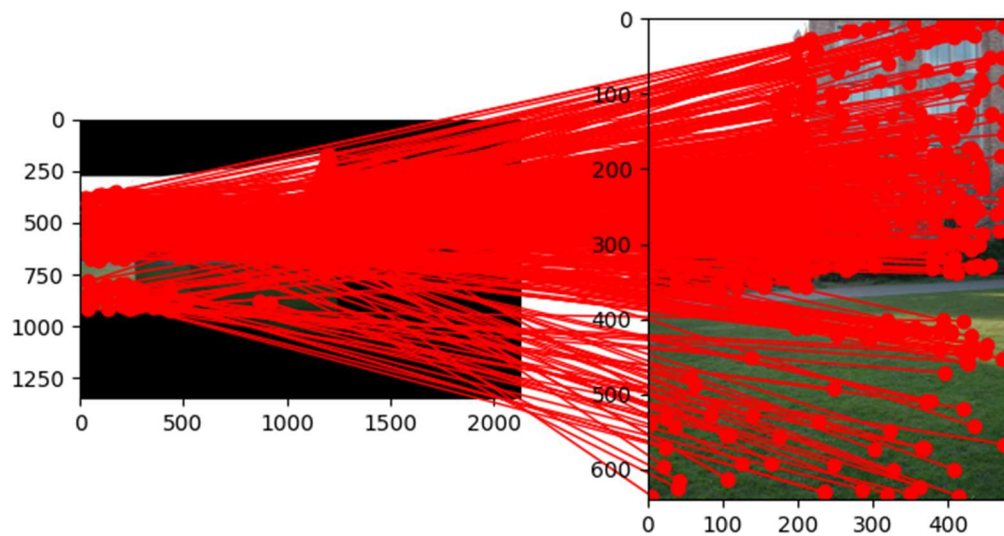




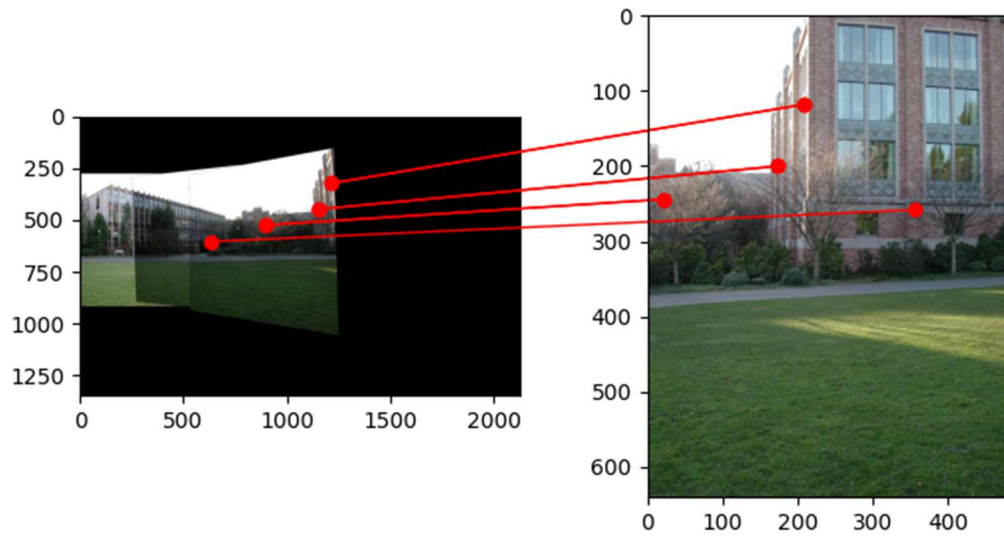
The images were then stitched together following the best fit projective transformation model.



Computing the key points between both images before RANSAC had 496 key point matches.



RANSAC was then applied to remove the outliers. This reduced the number of key point matches to 55.



The images were then stitched together following the best fit projective transformation model.

