

```
buildingDir = fullfile("/Users/ramarishithadandu/Downloads/drive-download-20220501T014048Z-001");
buildingScene = imageDatastore(buildingDir);
montage(buildingScene.Files)
```



```
I = readimage(buildingScene,1);
grayImage = im2gray(I);
points = detectSURFFeatures(grayImage);
[features, points] = extractFeatures(grayImage,points);

numImages = numel(buildingScene.Files);
tforms(numImages) = projective2d(eye(3));

imageSize = zeros(numImages,2);

for n = 2:numImages

    pointsPrevious = points;
    featuresPrevious = features;

    I = readimage(buildingScene, n);
```

```
grayImage = im2gray(I);

imageSize(n,:) = size(grayImage);

points = detectSURFFeatures(grayImage);
[features, points] = extractFeatures(grayImage, points);

indexPairs = matchFeatures(features, featuresPrevious, 'Unique', true);

matchedPoints = points(indexPairs(:,1), :);
matchedPointsPrev = pointsPrevious(indexPairs(:,2), :);

tforms(n) = estimateGeometricTransform2D(matchedPoints, matchedPointsPrev, ...
    'projective', 'Confidence', 99.9, 'MaxNumTrials', 2000);

tforms(n).T = tforms(n).T * tforms(n-1).T;
end
```

