IMAGE MORPHING

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IMAGES

CROSS-DISSOLVE ATTEMPT

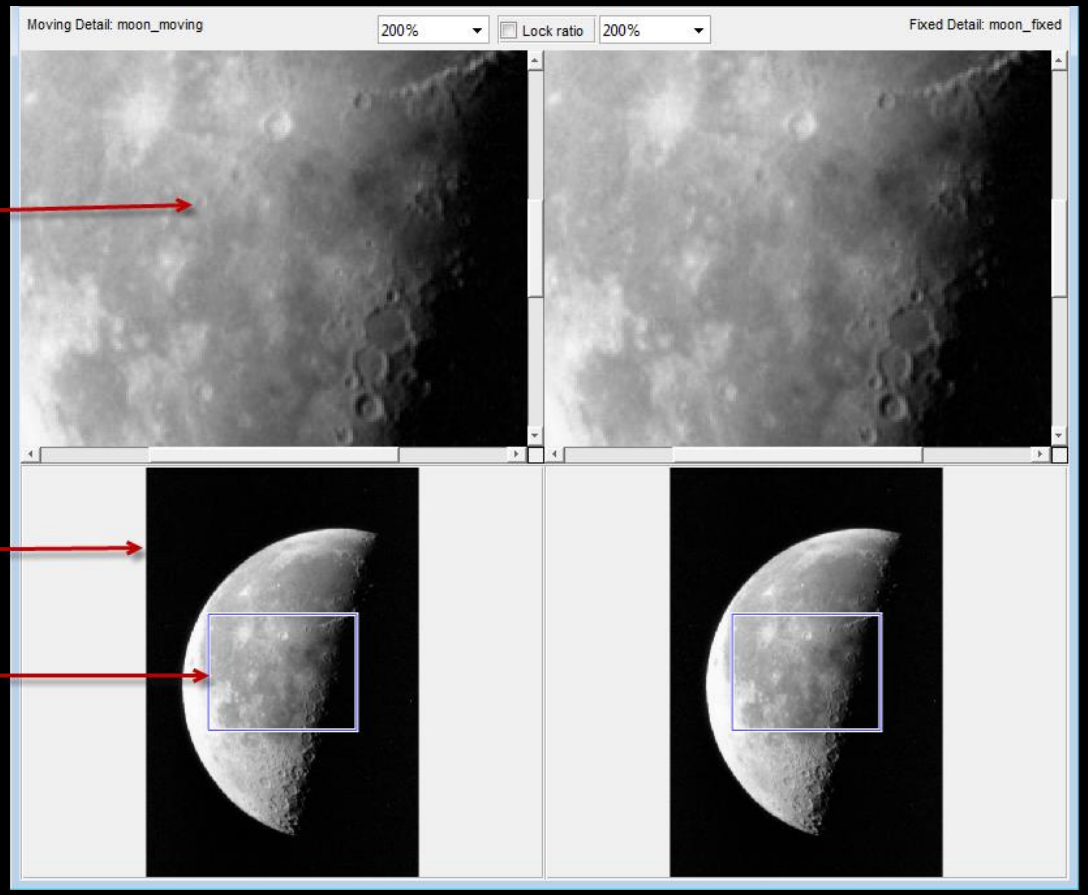
CROSS-DISSOVLE VS. MORPHING

- Cross-Dissolve has intermediate pixel values and combines them for each frame
- ImageFrame = (1-frame_rate)*Image1 + frame_rate*image2
- Morphing needs to have the objects change as well.
- The object needs to be transformed.
- Then the warped images can be combined with cross-dissolve

STEP 1: CONTROL POINTS

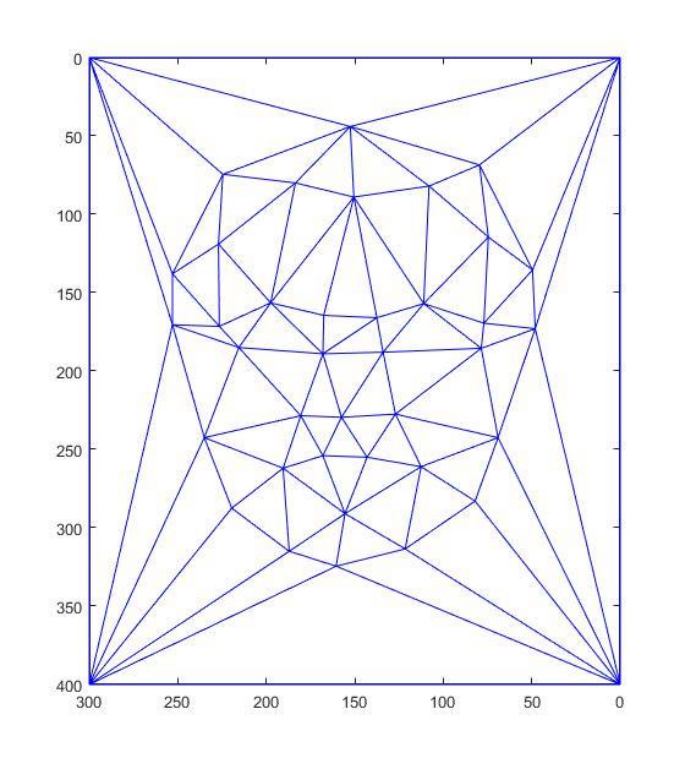
- Use cpSelect() function to select the points for both images.
- Must have corresponding points.
- Create image mesh with triangles
- Use DelaunayTriangulation() to create non-overlapping triangles
- Now the control points are ready to be morphed

STEP 1: CONTROL POINTS



cpSelect() 40 were selected

STEP 2: DELAUNAY

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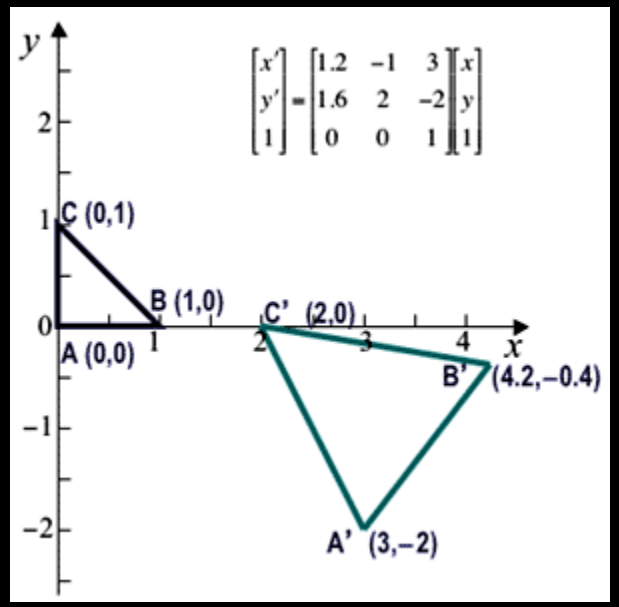
imagePoints =(image1Points + image2Points)/2;
DT = delaunayTriangulation(imagePoints);
```

STEP 3: AFFINE TRANSFORM TRIANGLES



- Find Intermediate Points
- IntermediatePoint = (1-a)*Image1Point+a*Image2Point
- Use Affine Transform for each triangle
- Interpolate
- FinalMorphFrame = (1-a)*image1Warped + a*image2Warped;

MORPHED IMAGE