I. Groceries: (500*375)

imresize() to ½ of original height (500*188)

seam resized, (500*188)

Somehow I feel the unconstrained imresize() looks better due to the nature of this image… The seamed image looks like either there are running water in front of the camera or the shelves are melting.

II. Seals (500*375)

Since we shrank this image vertically before, I'm going to do it horizontally this time...
imresize() to ½ height... (500*188)

And now comes the seam version (500*188)

Inarguably the seam version better captured the essence of the original photo. It is also easy to understand why the sky suffered the most removal as explained before. The compression of the seals and the beach also are well done and one can hardly spot any unnaturalness.

III. Trees (500*375)

I've done two horizontal reductions, so this one will be vertical.
left: imresize() to ½ width (250*375) ; right: seam carved to ½ width (250*375)

Since threes grow vertically, shrinking its width with imresize() doesn't really distort the image. The seam version looks like a crop at first, but of course it is different from a plain crop. This image is not fit for using the seam method because of its content filled with highly contrasted gradients.

IV. Winter Landscape (www.socksoff.co.uk/walls06.html) (500*375)

Left: imresize() to ½ width (250*375) Right: Seam resize to half width (250*375)
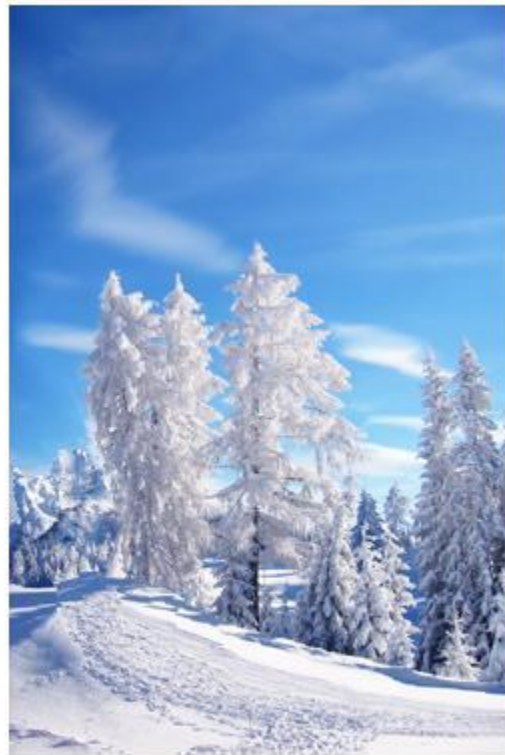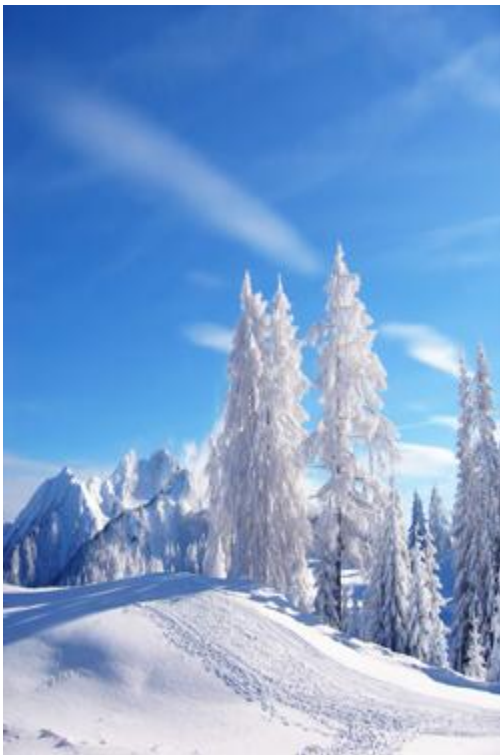
Obvious cloud artifacts and visible edge artifacts in the seam version compare to the original image but better shaped trees comparing to the imresize() version.

V. Crowd (http://www.mirrabikeco.com/bikeblog/wp-content/uploads/2007/05/mco-crowd.jpg) (579*600)

Height halved by imresize() -> (579*300)

And the seam version (579*300)

Though it's evident that the seam carved version looks better… but it is only so at first glance. Once an outline of a person is broken, spotting it is an easy task. In general, human forms should be explicitly protect from being carved, hence a picture filled with people are not generally a good idea to apply seam functions. But if the resolution and size are appropriate, using seam functions to create the feeling of "sea of people" is permissible.
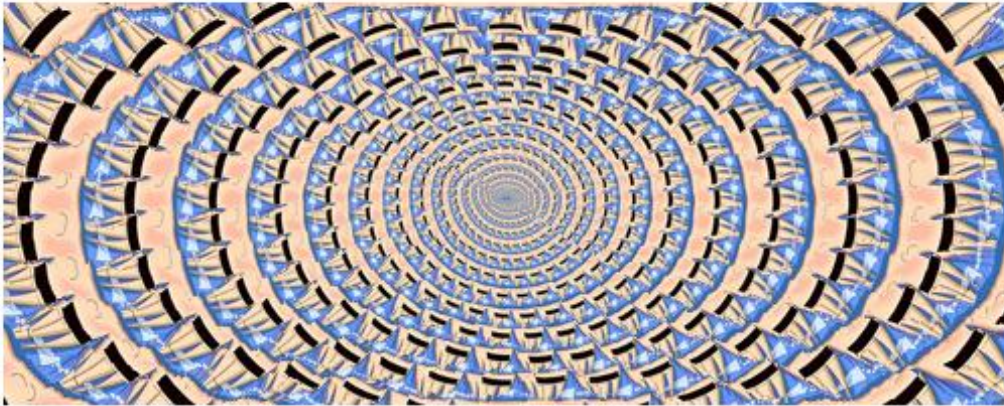
VI. Konata pattern (the url is lost) (500*400)
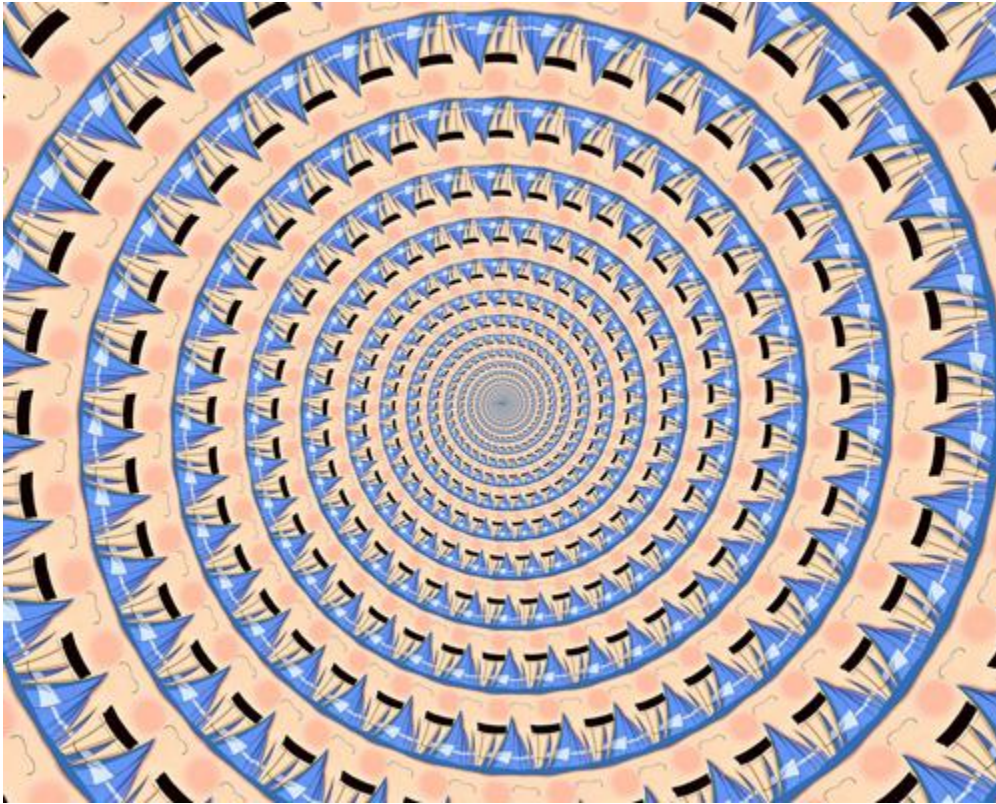
imresize() version (500*200)
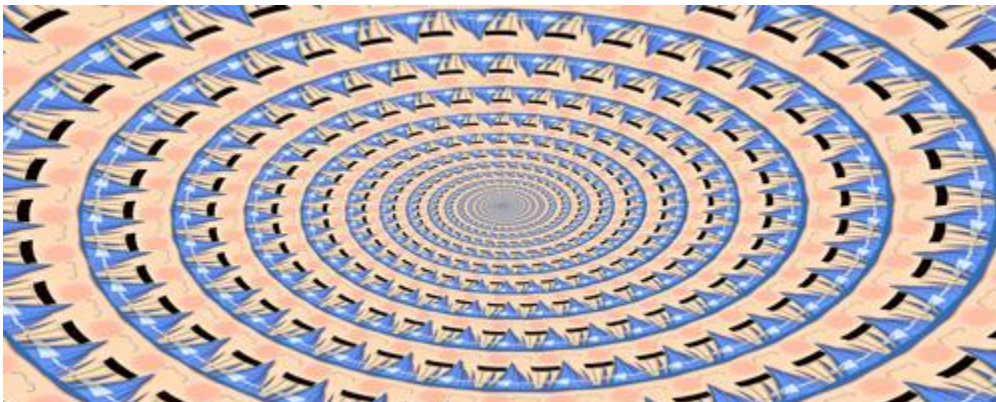
Seam carve version (500*200)

Seam carved version hardly makes sense. Neither the shape of the circle nor her face is preserved… It seems that scaling is the best option.

VII. Bridge (http://www.andreasrocha.com/stuff/2D/the_bridge/the_bridge_detail.jpg) (500*320)

Imresize() to ½ width… (500*160)

And seam carving… (500*160)

I'd say this seam carved version is a huge success compare to the earlier ones… no artifacts are visible and it preserved the middle portion of the original painting, the sunset and the bridge, since they are the main theme of the painting.