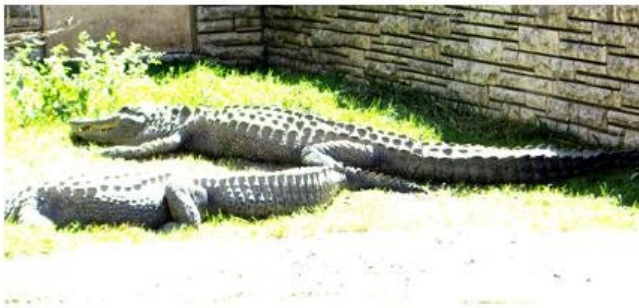


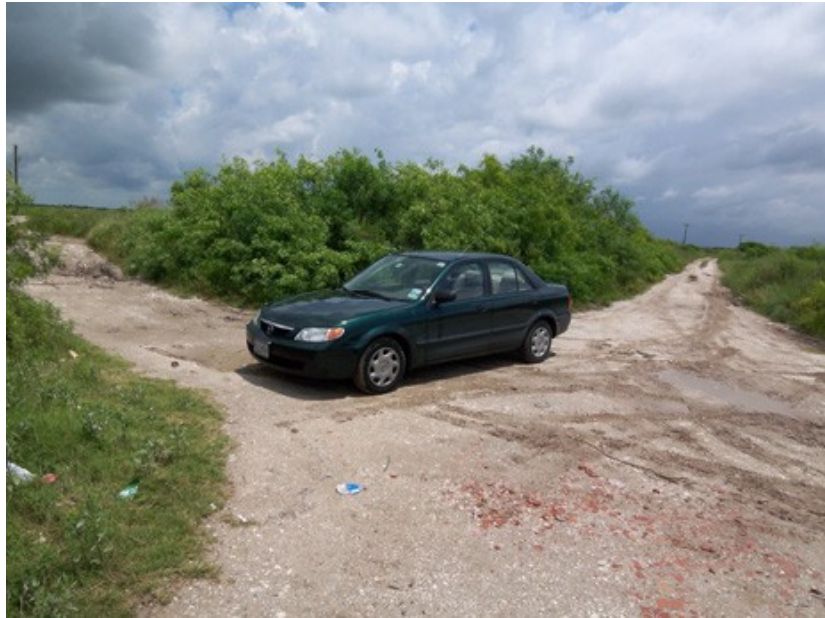
Bethany Barrientos
CS ID: bethany



Example 1: My friend took this picture from inside his truck. The top picture is the original image, it is 540 w by 135 h. The middle picture is the width reduced to 400 using seam carving and the bottom image is the width reduced to 400 using matlab re-size. Only one operation was performed on this image to reduce the width to 400. The original image has a large open space in the middle of the intersection. This space is reduced significantly in the seam carving re-size. This allows objects in the images, the vehicles and the buildings most notably, to maintain their size and scale in the re-sized image. In the image that was re-sized using matlab, the objects in the image all appear to be a little squished.



Example 2: This is a picture of some crocodiles my friends and I took at the zoo. The original image is 427 w by 320 h (top). The middle image was re-sized to 200 h using seam carving. The bottom was re-sized using matlab. The image that was re-sized with seam carving removed a lot of the grassy region from the original that was white, mostly maintaining the size of the crocodiles, although they are a bit squished because some of their middle sections, between the spikes on their backs was removed, also some of their sides. In the image that was re-sized without seam carving, the extra background space remains in the image and the crocodiles appear distorted.



Example 3: This is a picture of my car in a remote location. It likes to pose, because it doesn't know it's not a sports car. The original image (top) is 461w by 365h. The image of the left was reduced using seam carving first to 280w, then to 200 h. The resulting image removes some blank space from the road, making it appear that the hood of the car is near the grass, but because car is a solid color, many seams were also removed from the car, distorting the car and altering the shape. The re-size by matlab to 280 by 200, does a much better job of maintaining the shape of the car.



Example 4: This is a picture of groceries, the original image(top) is 500w by 400 h. It was reduced to 350 high, then to 300 wide using seam carving (bottom left). In the resulting image, the aisle has been narrowed, because it was a large space of about the same color. Because there are so many edges in the image, removing the seams caused it to look jagged in some place, where removed seams caused edges to become unaligned. The re-size by matlab (bottom right) doesn't have the same jagged edges, and looks a little nicer. It does however, devote less of the image to the objects on the shelves, because it maintains a large space between the shelves, that the seam carving removes.



Example 5: The original image (top) of seals is 500 w by 375 h. It was reduced to 200 h then 300 w using seam carving (right). The seam carving image, keeps the seals on the beach the same size, but brings them closer together, because it removes empty spaces on the beach. Because so much of the height was removed, the skyline appears to be curving and the ocean looks more wavy than the original. The matlab re-size(left) shrinks the seals, but is does maintain a straight skyline and a calm sea.



Example 6: This picture of trees was original 500w by 375 h (top). It was reduced to 350 w then 300 high using seam carving(left). From a distance looks okay, but if you look closer you can see that some of the smaller branches aren't lined up quite right. This is because removing of seams throughout the middle of the image distorted the alignment of the branches. In the re-sized image done by matlab(right), the branches are lined up properly. However, in the seam carved image, the trees who's branches spread out wider maintain their size, while in the matlab re-size all the trees appear to have branches that are fairly close together, as demonstrated, by the tree in the middle of the image with 3 branches splitting close to the bottom.