My friend, Cina. Original image 450 x 600, reduced to 250x300. Reducing width by 300 pixels did not affect facial features, due to the flash (which affected gradient), and wall in background. However, when 200 pixels were removed from the height, very strange artifacts appeared.
This image of a cliff (604x453 pixels) was reduced 200 pixels in height to 404x453. The resized image looks similar to the original image, with some distortion on the right side of the image. However, the trees and horizontal lines of the cliff were retained.
Original image 453x604 pixels, reduced to 453x304. Because of the low horizontal gradient in the original image, the content was maintained using the content aware resizing. Artifacts include the bending of cliff in background.
Because my dog is black, I expected a strong response for the gradient of my dog against the wood floor. The content aware resizing preserved most of my dog’s features. However, the edges of the cabinet on the right of the image are jagged.
Originally 375x500, reduced to 375x300. The image of trees shows no obvious artifacts from content aware resizing. Some branches are thinner, and the trees on the right side of the image are gone.
I tried to gently resize the image of groceries, by only reducing the height and width by 75 pixels each. After just the width reduction, the image looked very distorted because of the groceries at the end of the hallway. The horizontal reduction, produced some segmentation of the shelves in the image.
Original image 375x500, reduced to 300x300. There are no obvious artifacts from the content aware resizing, other than some slight segmentation of the pier and some distortion of the seals in the right side of the image.

Reduced 75 pixels from height, 200 pixels from width

Resized using imresize()