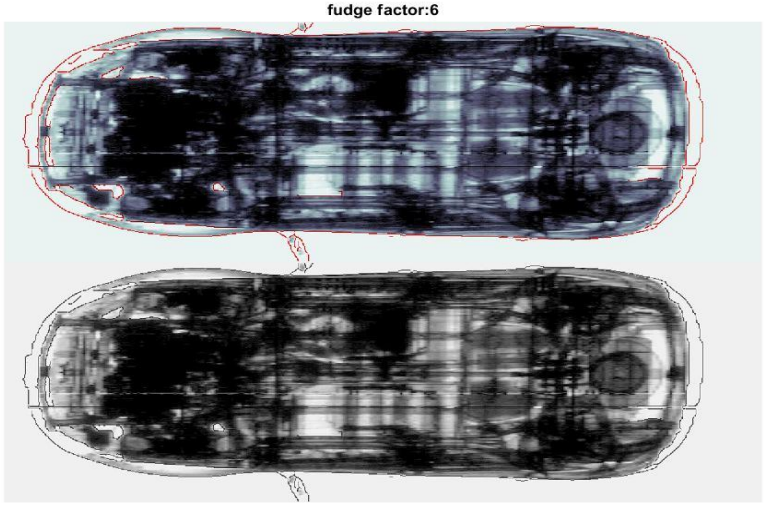
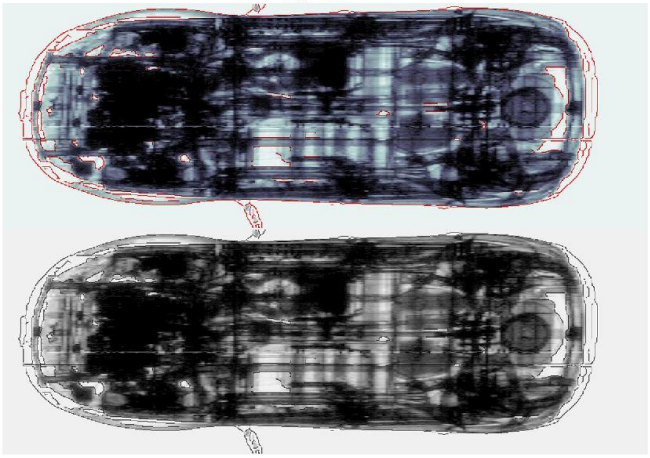
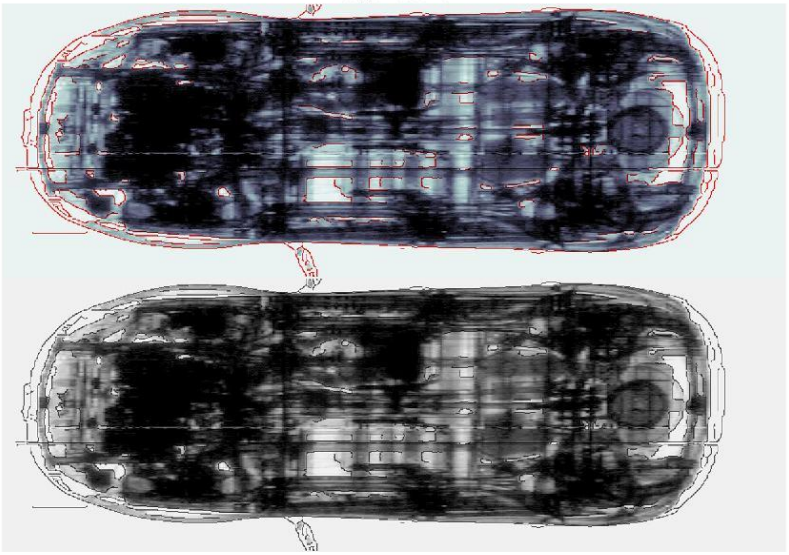
fudge factor:6



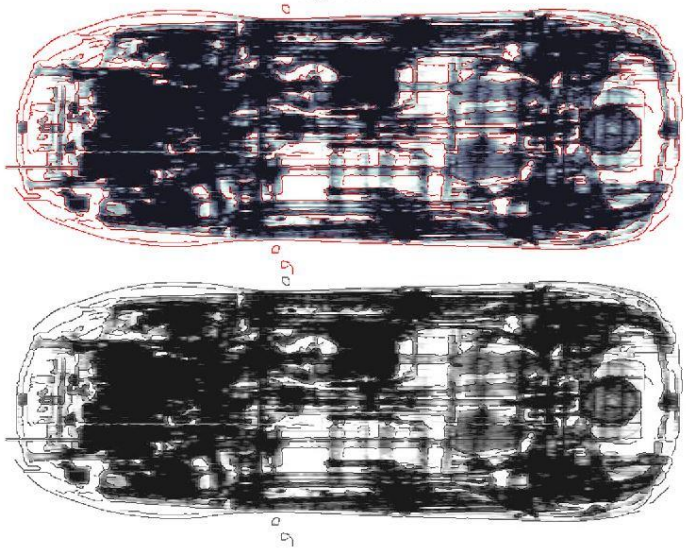
fudge factor:4



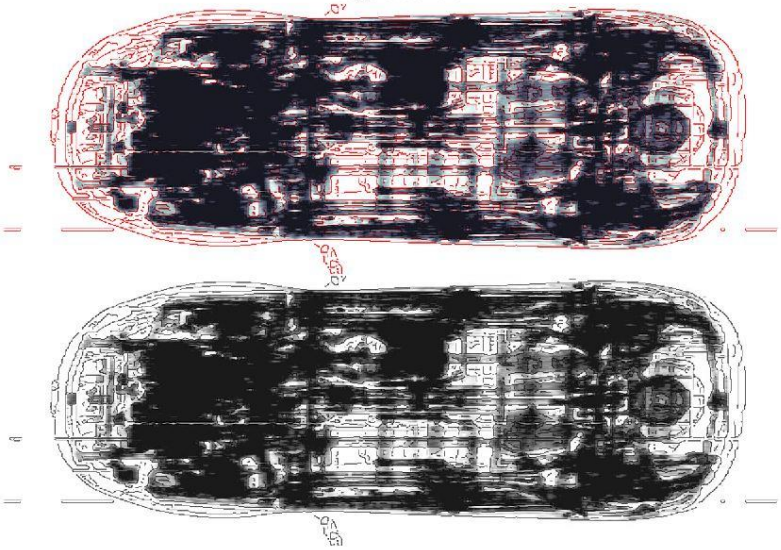
fudge factor:3



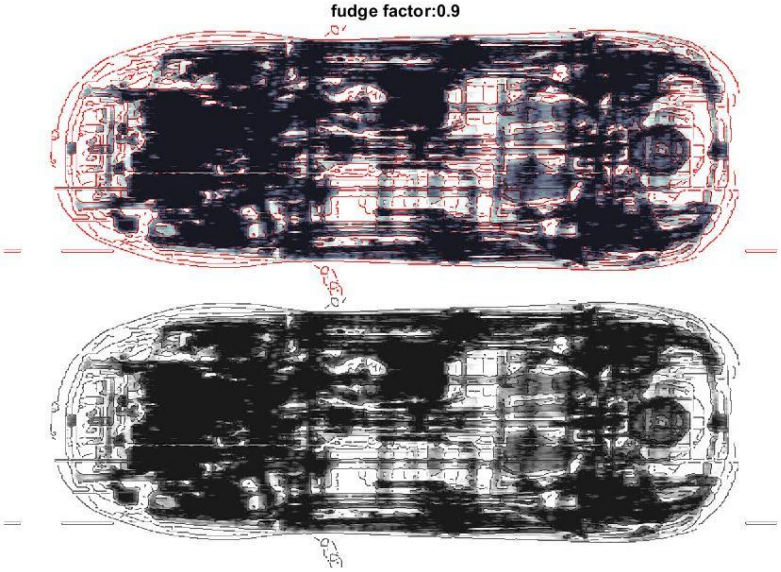
fudge factor:2



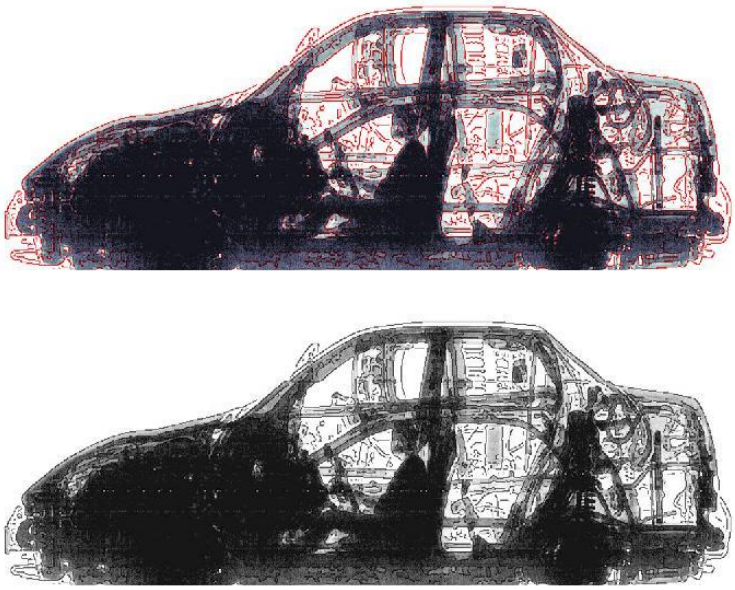
fudge factor:0.5



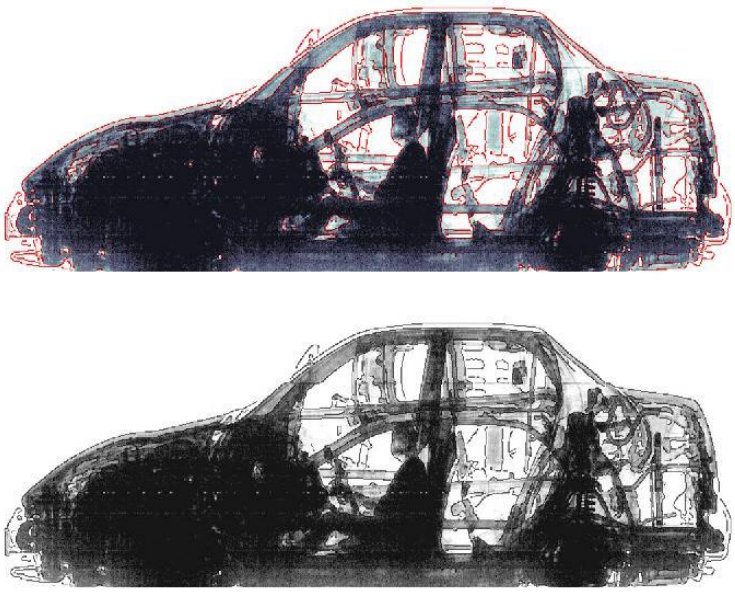
fudge factor:0.9



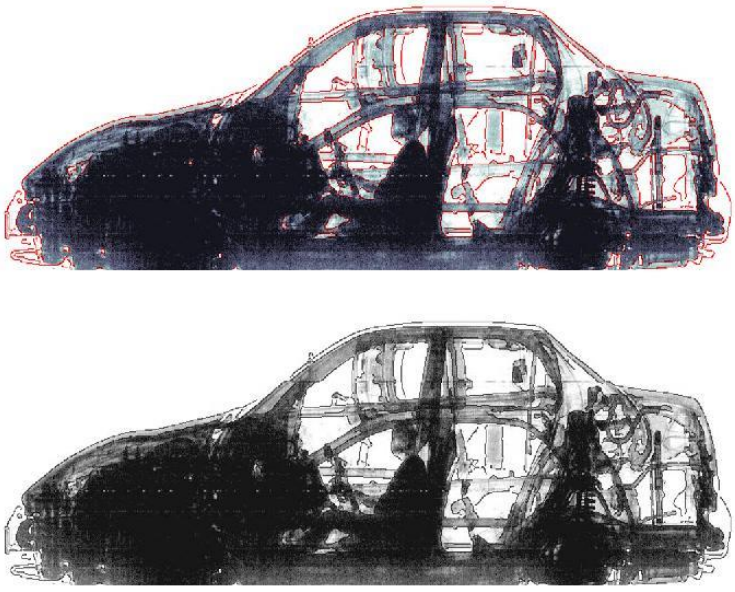
fudge factor:0.9



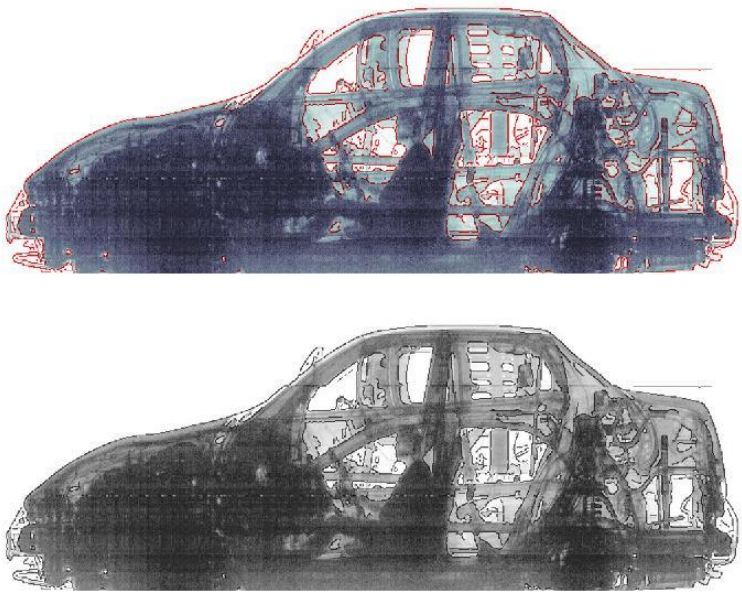
fudge factor:3



fudge factor:4,log



fudge factor:2,lin



BONE COLOR MAP IMAGE WITH EDGES AND ITS GRAY IMAGE

Step 1: Read the RGB images using imread function

Step2: Convert the RGB image to gray image

Step 3: Create a mask which should be applied to the images

hpf=[0, -1/7,0; -1/7,2, -1/7;0, -1/7,0] (normally it is a high pass filter mask used to bring out the edges)

Step4: [~, threshold] = edge(a1,'Canny') we use Canny edge detection method for more accurate detection

Step 5: fudgeFactor = 0.8(Change accordingly)

s = edge(a1,'Canny', threshold*fudgeFactor).With the fudgefactor and threshold we can control the detection of edges as you can see in the above images

Step6: s7=255*s

s7=uint8(s7)

z (:,: ,3) =s7

z(:,:,1)= zeros(size of the image)

z(:,:,2)=s7

Convert the edge image into uint8 and into RGB image with above process

Step7: a9=imfilter (grayimage ,hpf)

a9=a9+20

h01=histeq (a9)

a11=h01+grayimage

Imwrite (a11, bone(250),'image.jpg')

In step 3 we created a mask, Apply the mask using imfilter function and add 20pixel to make bright

And next use **Histogram equalization:** This method usually increases the global contrast of many images, especially when the usable data of the image is represented by close contrast values. **Histogram equalization** is a method in image processing of contrast adjustment using the image's histogram.

Histeq function is used for histogram equalization

Add both grayimage and image after histeq to bring out the dark area of the image and make the image clearer. Save the image with bone colormap as above

Step8: a12=imread ('image.jpg')

a13=a12-z

From step 6 we can subtract the edge image from saved bone colormapped image to get the bone colormapped image with edges as you can see in the above images