

Transcript of the video tutorial

Seife Kassahun

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Hi my name is seife kassahun i am computer science graduate student at brandeis university. today i will show the code i developed using the matlab programming lanaguage to compress and decompress an image using the jpeg standard. first let see the main function that reads the image and converts from RGB to grayscale. Then it will pass the gray scale image and the compression factor which is 8 to compress and decompress function .This is the module that does most of the job of compression and decompression. First we will subtract 128 from each 8x8 block and apply 2 dimensional dct . And then divide the entries of each 8x8 block by quantisation table . This is the quantisation table. After that we scan each block again in zigzag order. This is also the code for the that does zigzac scan.this is the final step in the compression step. There are plenty of off the shelf softwares or you can develop you own . for our part we use to gzip the compress these values. Now the next step is go to back in reverse order to get the original image. First we multiply each 8x8 block using the quantisation table and apply inverse 2 dimensional dct and add 128 . Then we will plot the two images the original and compressed version of the original image. As you can see it is hard to see the difference between the original and compressed version .Thank you that was all