CS-682 Computer Vision Deepak Kanuri(G01070295)

My website: <http://mason.gmu.edu/~dkanuri>

Password: deepak

## I have converted the image to grayscale and performed 5 transformations on colour and grayscale images each. The transformations on color are affine transform, blended, blur, rotated, translated. The transformations on color are perspective transform, blended, blur, rotated, translated.

## The computer vision application that I found interesting is Amazon Go. The way customers can just walk out after picking up their goods, where the camera recognizes the person and the goods and adds the product to the cart and bills the person on the way out.

## The link is: https://emerj.com/ai-sector-overviews/computer-vision-applications-shopping-driving-and-more/

## What is the space requirement for the pyramid?

## Let the original size of the image be ‘x’. After going one level down, the size becomes x/4, another causes the size to be x/16 and so on..

## Therefore x + x/4 + x/16+…. =(1/(1-1/4))x=4x/3. The space requirement is 4/3 times the original image.

## What is the size of the smallest rectangular image needed to pack your pyramid?

The smallest size to pack the entire pyramid is (n)\*(n+n/2) where ‘n’ is the number of rows and columns of the original image.