Homework 4 Report

Tuoheng Zheng

Design

Succeed with tub-1.pug, run out of time for tub-2.png

I don't have any self-written function for this homework. Instead, all of it is written in script. I used maketform() function from Matlab toolbox to generate tforms for transforming tub images. h value in the input is carefully chosen after measurement and calculation for the tub image. Then I used imtransform() function to apply the appropriate type of transformation. After multiple transformation with the above methods, the tub image was successfully transformed into the direction and xy scale of original image. I also noticed that the grey value of the image is reversed, thus I applied algorithm to reverse the value back.
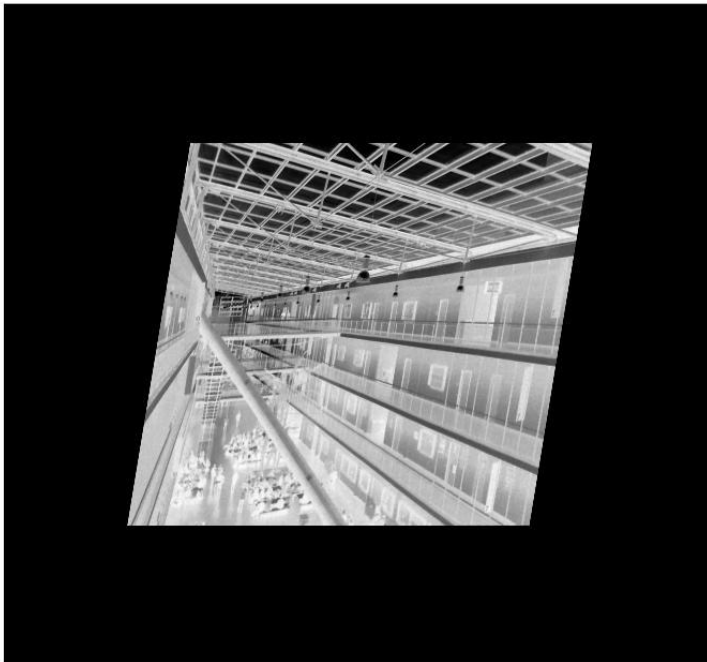
Pixel info: (X, Y) Intensity

Conclusion

Image transform had been so far the most complicated algorithm I had encountered in the course. This should surely train my skill to take use of Matlab toolbox functions to transfer an image. I also thoroughly read the corresponding chapter in the book for this homework. I think it had me understood this topic.