Robotic Vision

Assignment 03

Due: 5-Feb-2019

Geometric Transformations of images in ANSI C.

Background:

To have a basic understanding of how images are handled and manipulated, ANSI C provides an excellent programming language. Geometric transformation is the manipulation of images in order to rotate, mirror, scale down, scale of, and flip them.

Objective:

Using LenaGrey 512x512.pgm image file we have been using in class and the template I gave you, write 5 different C programs that do the following image geometric transformations:

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Original image | Flip horizontal | Flip vertical |
|  |  |  |
| Rotate left | Rotate right | Rotate 180 |
| Image geometrics transformations to perform | | |

Upload the following:

* Upload to the 5 programs written in C.
* Upload your 5 manipulated images as evidence.
* Include a report, written in word, which explains how your algorithm works for each case. This could be done using a flow chart, block diagram or any other representation.