Matlab

Rotate and Flip photos
Session 7

MS.c Haneen ALhariri

MS.c Ola Ali

In the previous lesson, we noticed how to read the image from the device, display it and save it in a variable.

X=imread('lacation\name image.type image');
Imwrite(x,'lacation\name new image.type image');
Imshow(x);

Whereas :
 imread: to read the image from the device
imwrite: to save the image to the device
imshow :to display the image in Matlab

Image rotation

 is a common routine in image processing. it rotates the image or object by any angle. It supports for image matching and also alignment. In general, precise image rotation is critical for most of the image processing jobs, namely, feature extraction. Likewise, all computer vision operations require image rotation.

Where is the most common use of image rotation in MATLAB?

- Artificial intelligence
- computer graphics
- Monitoring Cases

rotate the image in Matlab:

When you rotate an image using the (imrotate) function, you specify the image to be rotated and the rotation angle, in degrees. If you specify a positive rotation angle, the image rotates counterclockwise; if you specify a negative rotation angle, the image rotates clockwise.

```
X=imread('lacation\nameimage.typeimage');
Y=imrotate(x,50);
imshow(y);
```


Or

```
Y=imrotate(x,180);
imshow(y);
```

crop photo

To crop a specific image, type:

imcrop(x)

A window will appear to reduce the image as required and we save it from the (imwrite) command

X=imread('lacation\nameimage.typeimage');
Z= imcrop(x);

imwrite(z,'lacation\name new image.type image');
imshow(z);

photo flip

To flip the image from left to right

Z=fliplr(x);

Imshow(z);

To flip the image from top to bottom
Z=flipud(x);
Imshow(z);