

Project
On
OpenCV
(IT IV Semester)
2020-2021



GraphicEra
(Deemed to be University)
Accredited by NAAC with Grade A

Submitted by:

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ABOUT THE PROJECT:

The project is an image processing which uses OpenCV to display a rotated image which is based on what the user inputs. The user could input any of the following to get the results as desired:

1. For 0° rotation
2. For 90° clockwise rotation
3. For 90° anti-clockwise rotation
4. For 180° rotation

INSTRUCTIONS

The image path must be changed to anything of our choice before running the program. But if the image is already in the same folder as our program then there is no need for the full path of the image.

REQUIREMENTS:

HARDWARE REQUIREMENTS:

- Processor: Intel®Core™i5-1035G1 CPU @ 1.00GHz,1190 Mhz,4 Core(s),8 Logical Processor(s).
- RAM: 8GB

SOFTWARE REQUIREMENTS:

- OS: Windows 10
- OpenCV 4.5.1 or latest
- Microsoft Visual Studio
- CMake for installing and configuring OpenCV
- Visual Studio Build Tools

MODULES:

- imread: This is the inbuilt OpenCV function to read an image. Just pass the image path as parameter.
- Rotate: this function rotates the image, parameters passed are (image-object, image-object, flag). Flag could be of three types:
 - ROTATE_90_COUNTERCLOCKWISE
 - ROTATE_90_CLOCKWISE
 - ROTATE_180
- namedWindow: Creates a window with a name. Parameters passed are (name of the window, flag). The flag could be WINDOW_NORMAL, WINDOW_FREERATION, WINDOW_GUI_NORMAL, WINDOW_GUI_EXPANDED.
- imshow: Function assigns the image to the window. Parameters passed are (name of the window, image_object).
- waitKey: waits for the user until a key is pressed.
- destroyWindow: destroys the window. Parameter passed is (name of the window).