**SYNOPSIS**

**WRITING**

**Mini Project**

**(2020-2021)**

**“Measuring the size of an object in an image using OpenCV”**

**synopsis**



**Gla University Mathura**

**Team Members**

**Paras Varshney**

**(University Roll No-181500453)**

Supervised by

Mr Piyush Vashisth

Asst.. Professor

Department of computer science Enginnering & Application

CERTIFICATE OF APPROVAL

We hereby certify that the proposal for the project entitled “Measuring the size of object in an image with open CV” by our group of course computer science has been prepared after due consultation with us

The proposal has our approval and has to us knowledge the potential of developing into a comprehensive project work we also agree to supervise the above-mentioned project till its completion

Signature of Supervisor…………..

Name………………………………..

Designation……………………….

Mobile no………………………….

Addresss…………………………………

Content of Synopsis: Page no

1.Introduction 4

2.Technology Used 4

3.objective 5

4.Feature of Project 5

5.References 5

Introduction of the project

Measuring the size of objects in an image is similar to computing the distance from our camera to an object in both cases we need to define a that measures the number of per pixels in a given matrix

We call this ‘pixels per matrix’ ratio which I have more formally define in this project

In order to determine size of an object in an image we first need to perform a calibration using a reference object our reference object should have two important properties

We should know the dimension of this object (in term of width or height) in a measurable unit (such a milli metres, inches etc)

We should be able to easily find this reference object in an image, either based on the placement of the object (such as the reference object always being placed in the top-left corner of an image) or via appearances (like being a distinctive colour or shape, unique and different from all other objects in the image). In either case, our reference should be uniquely identifiable in some manner.

Technology Used

* Python
* Deep learning
* Mathematics
* Open cv

Objective

The objective of this project is only that you can utilize your reference object to calibrate your pixels\_per\_metric variable, and from there, compute the size of other objects in an image.

Features

* Using OpenCV we can measure the size of the object
* In easy way we know the dimension of a image by using this project

Refrence

* <https://www.javatpoint.com/python-tutorial>
* https://docs.opencv.org
* <https://www.wikipedia.org/>
* <https://www.youtube.com/>
* <https://www.google.com/>