

FOSSEE Image Processing / Computer Vision Toolbox Internship Evaluation

Thank you for your interest in FOSSEE Toolbox project. You have expressed interest in the Image Processing / Computer Vision Toolbox. Before you start working on the toolbox, we would like to assess your coding skills. Please read the details mentioned below.

There is one section in this test. Both problems are compulsory.

Section- I

Solve both the problems given below using the images provided in **images** folder-

Image 1- oscarSelfie.jpg

Image 2- jellyfish.jpg

Problem 1

- Detect all the faces in Image 1
- Detect the eyes of Ellen DeGeneres
- Get the RGB value at the location of the centroid of Ellen's eyes
- Display the RGB value on the console

Problem 2

- Detect all the jellyfishes in Image 2
- Display the image and mark the centroid of each jellyfish with a red cross.

The steps you would follow are-

1. Install OpenCV 2.4.9 or later versions.
2. Read about OpenCV. Go through the tutorials.
<http://docs.opencv.org/doc/>
3. Solve both the problems using OpenCV and C++. Using brute force method for any of the steps will not get you any points.
4. Add appropriate comments throughout the code. Place header comments that include your name and other details. Cite any sources you may have used. This step is compulsory. **Plagiarism of any sort will not be tolerated and your code will be summarily rejected.**

You cannot use any other tool/library besides OpenCV.

Code Submission

Failure to follow the steps listed below will lead to your disqualification.

1. Create a **private Bitbucket** repo. The name of the repo should be- (your) **First name Last name- Image Processing/Computer Vision Toolbox**. Add **fosseeToolbox** as a collaborator to your private repo. **Any repo with public access will be rejected.**
2. Create one folder in your repo with the name- **Section I**
3. Push section I code to the folder Section I. Add a readme file. The readme file should explain how to execute the code. Please provide all compiler and loader flags. The readme file should be

exhaustive.

4. Fill the form and submit your Bitbucket repo details here-

<https://goo.gl/forms/XkBY03SLirTA8Elh1>

Code submitted through email will be rejected. Please look at online resources to learn how to use Bitbucket. If you have any doubts, please email toolbox@scilab.in. Email sent to any other email address will not be answered.

The deadline to submit the Google form is 5 PM, 26 March, 2017. This deadline will be strictly enforced. Emails asking for extensions will be ignored.