

# Induction Task

OpenCV is a computer vision library that can be used for processing and feature extraction on images. You can try out the [tutorials](#) for the library or even the sentdex [videos series](#) to get some hands-on experience

CV involves the use of various techniques to derive meaning out of images. This is especially important for robot perception where the robot should identify and analyze its environment. OpenCV is a library focused on providing real-time vision capabilities. The first part of your task is to get familiar with the library (available in both python and C++) and to use it for creating a shape recognition program. When given an image ([example](#)) containing different shapes of different colors, the program should output a list of the shapes and what color they are.

## Submission Guidelines

You should create a GitHub Repository consisting of all the required documents, files, and code that you are required to submit for the questions you attempt. The title of the repo should be ERC-InductionTask-2021. All the code should be readable and properly commented on at relevant places. Public repositories on GitHub are often used to share open-source software. For your repository to truly be open source, you'll need to license it so that others are free to use, change, and distribute the software. Do not forget to add a license to your repository and create a separate LICENSE.md for it. An MIT license would be recommended but you can decide which one you would like using this [link](#).

An integral part of most software projects, Git is a tool for version control and managing changes to code. Check out this [course](#) for an intro. Make sure to sign up for the [Student Developer Pack](#) on GitHub.