

Lab 6 - Contours and Shadows

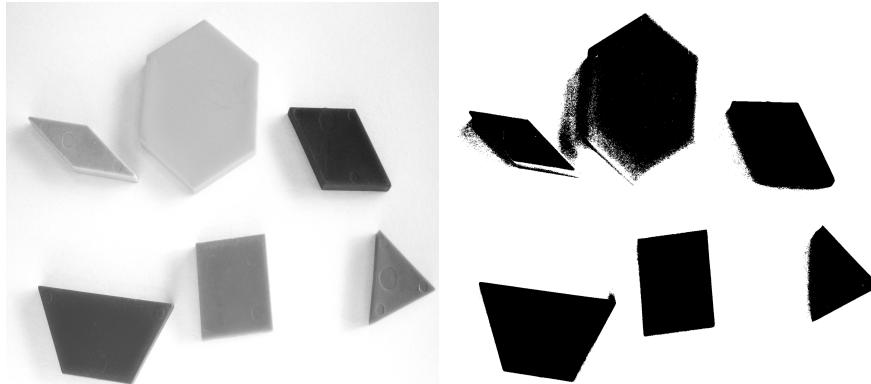
Due 10/22/2024

1 Introduction

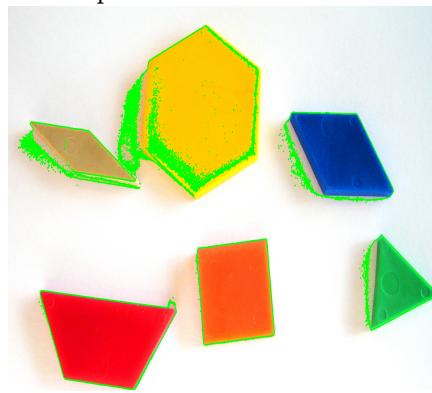
Finding the contour of an object is the first step to object detection. However, lighting and shadows (i.e clouds in satellite images) can cause a lot of issues when trying to find contours. Especially with lighter color objects. In this lab you must find a way to deal with and mitigate the effect of shadows on an object. There are six colored blocks, your must write a program to find the contour and center point of all six objects.

You can use any built in function in python that does not require the TAs to download extra libraries.

Example of shadow effects on threshold gray scale images.



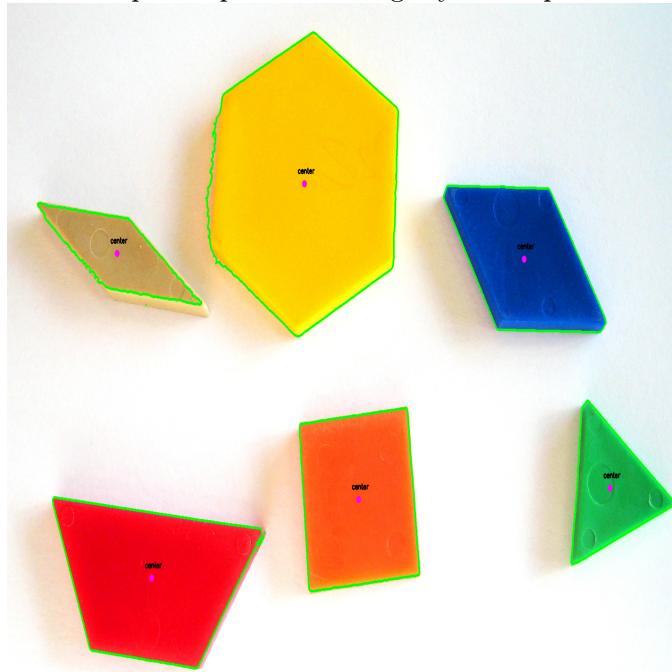
Example contour with shadows.



2 Grading (Out of 100 points)

- 10 Points : Add your name and date to the beginning of your code.
- 10 Points : Use appropriate comments throughout your code.
- 30 Points : You mitigated the effect of the shadows.
- 20 Points : You are able to find the contour of all six blocks the effect of the shadows.
- 30 Points : You are able to find and display the center point of all six objects.

Example output that will get you full points.



3 How to turn in

You must submit a zip folder that includes all files, folders, and images that are required to run your program. Name the zip folder "Lab6-Lastname.zip" and upload it to canvas

Good Luck Cat!

