

Image Processing

**ECE 4367 / ECE 5367
Fall 2018**

Project 1

Write a Matlab script that can automatically localize and undo the rotation of a playing card that is presented to a camera.

Your script must follow these restrictions and specifications:

1. It may only use Matlab's image I/O (e.g., imread), display (e.g., imshow) and imrotate () functions. Use of other Matlab functions may be allowed after a case-by-case consideration.
2. Except for I/O filenames, it may not ask for any user input.
3. It must display the input and output pairs as shown in the example below.
4. It must successfully process the three test images that are provided. Processing other test images is highly recommended.

You are to work in groups of 2 and turn in a single submission.

Upload a flowchart of your algorithm and a single m-file to Blackboard no later than midnight on 09/25/18.

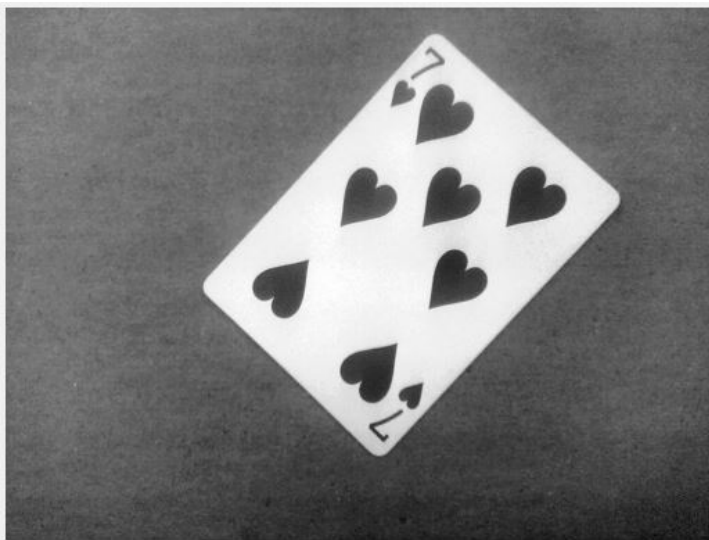


Figure 1. Input Image



Figure 2. Output Image – aligned and cropped