Image Processing

ECE 4367 / ECE 5367

Project 2

Write a script that can automatically localize and undo the rotation of a playing card, leaving it upright and cropped.

Your script must follow these restrictions and specifications:

- 1. It may only use predefined functions for image I/O (e.g., Matlab's imread), display (e.g., Matlab's imshow) and geometric transformations (e.g., Matlab's imrotate). Use of other functions may be allowed after a case-by-case consideration.
- 2. Except for the input filename, it may not ask for any other 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.

Upload a <u>flowchart of your algorithm</u> and a <u>single source file</u> to Blackboard before the deadline.

Be sure to name files as Lastname_Firstname_P#.*

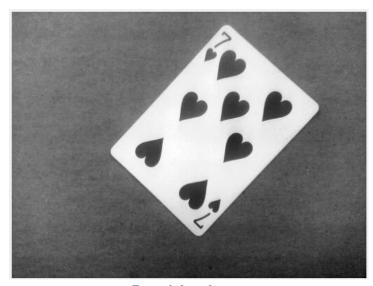


Figure 1. Input Image



Figure 2. Output Image – aligned and cropped