

## **Image Processing**

**ECE 4367 / ECE 5367**

### **Project 4**

Propose and implement an algorithm that may be used to automatically determine the rank and suit of a playing card.

Your script is to begin with acquiring an image of a card and end with the declaration of the rank and suit of that card.

For this project, you can form a group with one other student and turn in a single project.

Turn in the following:

- 1) The code
- 2) A single document that includes
  - a) List of assumptions
  - b) Algorithm pipeline
  - c) Subset of results
  - d) Brief description of contribution of each group member
  - e) List of references
- 3) A short video demonstrating your approach with a variety of cards

Note that your results must be reproducible. Also, classifiers of any type that take as input an image of the entire card and output its class (i.e., rank and suit) are not acceptable.

**Archive your files (zip only) into a single file named: lastname1\_lastname2.zip and upload to Blackboard before the deadline.**