

Due: Tuesday February 1st at 6:00am

## Assignment 1—A basic application

### *In a nutshell*

Implement a basic application that loads an image, finds an object, marks the location of the object, and saves the image.

### *Details*

1. Take a digital photograph of an object with a unique color, i.e. nothing else in the shot should have the color of the object.
2. Write an application that
  - a. Loads the image.
  - b. Finds the object.
  - c. Marks the object with a rectangle that circumscribes the object. There should be some space between the rectangle and the silhouette of the object.
  - d. Saves the image, with the marked object.
3. GUI
  - a. Provide a button that loads the image,
  - b. a button that finds and marks the location of the object,
  - c. and a button that saves the image.
4. Extra credit 3% (in percentages of total course grade)
  - a. Take a video of the object, track the object in each video frame

### *Turn in*

- Send an email to the instructor with the URL of an archive that contains:
  - Your source code
  - Your binaries
  - Your input image
  - Your output image