## **Project P1: Project Start!**

CS 6640 Fall 2020

Assigned: 24 August 2020

Due: 15 September 2020 (handin all work on CADE)

## **Project Selection**

You must select one of the following, and then work on it for the rest of the semester. Grad students proposing a project related to their research must start discussion early to get it approved.

- *CS5956 Students*: Industrial Inspection (see studentproject1-cola.pdf in class Canvas page). An automated inspection task for the identification of faults in soft drink bottles leaving a production facility.
- *Grads* with their own research-related project: must be approved before start. Start discussion with instructor immediately!
- *Grad Class Project*: Semantic Analysis of Digital Maps (see Map-Project.pdf in class Canvas page). Automated analysis of physical and man-made features in a map.

## P1 Assignment:

Provide a discussion of the details of the image processing problem to be solved in terms of specific outcomes of the analysis. Describe the data to be used, how ground truth will be determined, and what specific measures will be an order to evaluate the results.

Discuss how techniques in Chapters 1 and 2 of the text can be applied to the problem, what functions were developed to try them out, and the results of using them. Report experiments performed to explore possible approaches.

**P1 Handin:** Handin (on the CADE):

- Report (PDF)
- Matlab Code

Provide enough detail and everything necessary to duplicate your results.