COMP 4900C: Assignment 2
Due: Thursday, March 1, 2007

The eigenvalue-based corner detector (Harris corner detector) has already been implemented in OpenCV. This assignment requires you to re-implement it using the basic building blocks in the OpenCV and Ch library and experiment with different parameters. This will serve as an exercise to get yourself familiar with the library and the basic operations on images. The following steps are recommended.

1. Write a program to implement the eigenvalue-based corner detector. You may use the template written by our TA and plug in your functions. Check the course webpage for this template and other sample code.

2. Use HighGUI to load and display images as well as interactively changing the threshold for the corner strength. Draw marks (e.g. crosses) at corner locations.

Hint: use the code in the sample/c/edge.c as an example of how to use the HighGUI. The documentation of the corner detector and related functions is in doc/ref/opencvref_cv.htm. The documentation for drawing tools is in doc/ref/opencvref_cxcore.htm under "Drawing Functions".

Submit your code through Carleton's Raven System.