Project: Intelligent Pattern Recognition of Moving Organisms Advisor: Santosh Pandey

# Weekly Report #5, Group 03: 2/19/2012

## **Accomplishments**

- Learned from the previous group's source code.
- Simple centroid detection and background subtraction.

### **Plans**

- Continue to familiarize ourselves with C++ and OpenCV.
- Develop an early prototype to test low-level systems and concepts.

## **Pending**

- Establish a weekend meeting time for programming as a group.
- Brainstorm team roles for those that don't already have one.
- Get OpenCV working with the Microsoft Video 1 compression codec.

### **Individual Contributions**

#### Colin

My focus this week has been on ensuring that our program will be fully compatible with the
video codecs defined in our functional requirements. To this end, I tested several recordings of
C. Elegans in a variety of video codecs with OpenCV in order to ensure compatibility.

### Ryan

• I went through Chapter 10 of the OpenCV 2 book and implemented their simple background subtraction example. It works, but is very mediocre. For my next toying with background subtraction I'm going to try using the BackgroundSubtractor class (it only makes sense!). I also made a few diagrams and did some brainstorming about how classes should be organized that I'm going to bring to the next meeting. Didn't make it to Friday's meeting because my dog hurt his leg and I had to take him to veterinarian (he's okay).

### Shusheng

For this week, I focus on the working of find the centroid of a specific object. The majority part
of the code works very well with warm centroid. Then I will continue work on the previous
group code to find the method they used for find centroid, tail and head of the warm.

#### Laith

Read and analyzed the old source code. Made a summary about the major classes and what
they do in order to start us thinking about how our program well be structured.