

# Weekly Report #2, Group 03: 1/28/2012

## Accomplishments

- Decided on team roles.
- Finalized meeting times: Tuesdays and Fridays at 4:00pm.
- Decided to use C++ and OpenCV as our programming language and computer vision library of choice.
- Observed one of the drug experiments performed on *C. Elegans* in the lab.
- Defined functional requirements of the worm tracking software.
- Acquired the source code for the software from the previous senior design project.

## Plans

- ◇ Continue to familiarize ourselves with C++ and OpenCV.
- ◇ Complete weekly computer vision assignment.
- ◇ Sit in on Dr. Stoytchev's class, Cpr E 575, on computer vision.
- ◇ Analyze the source code of the previous worm tracker.

## Pending

- Lab access for each group member
- Create a website

## Individual Contributions

### Colin

- ◇ This week I researched and compared our three primary choices for programming language and computer vision library: C++ and OpenCV, Python and OpenCV, and Matlab and the Computer Vision toolbox. I also checked out a book from the library on machine learning applied to video and image processing in case there was something that might be useful to us. Finally, I assumed the role of communicator and took notes at our meeting on Friday.

### Shusheng

- ◇ During this week I had 2 meetings with Dr. Pandey. We have seen how to do the experiment of *C. elegans*, and Roy gave us the assignments of Open CV. I continue the work on being familiar with the C++ language and Open CV library. What's more, I also briefly read the 3 papers.

### Sam

- ◇ We met with advisor twice in this week, and we discussed our goal and some requirements. The advisor gave us some assignments to do, which he thinks could be very helpful. I read some paper about *C. elegans* and OpenCV, and get more familiar with those stuff.

Ryan

- ◇ I was voted as the leader for the senior design project. I gave Colin access to the weekly report individual contribution form, as he will be submitting the reports from now on. Finished some of the pertinent pending issues from last report, including adding relevant lab users, including Roy, who it looks as if we will be working very closely with. I delved a little deeper into OpenCV, after installing it last weekend. I ended up running the sample "blobtracking" example, though I didn't have much to run it with (and ended up using a scene from "Megamind" provided with the OpenCV package). After looking over the code, I decided I most definitely need to brush up on my C++, and so dug out my old C++ book. I also read the last of the worm-tracking papers, which I didn't have an opportunity to read last week.

Laith

- ◇ We attended a lab experiment as a group to familiarize us with the actual experiment we are doing the software for. This will help us find ways to track the worms as we get familiar with their normal behavior. I started learning and reading about OpenCV and watching you tube tutorials so I can start doing my experimental coding myself. I also tried to install the software needed but ran into some compiling problems. I am using OpenCV on Eclipse.