

# Weekly Report #1, Group 03: 1/23/2012

## Accomplishments:

- E-mail listserve created: dec1203@iastate.edu. List includes Santosh Pandey, Archana Parashar, and group members.
- Met as group for the first time:
  - Got familiarized with lab.
  - Learned about *C. elegans* and project scope.
  - Demoed existing software.
  - Got *Nature* paper for reviewing.

## Plans:

- Complete pending tasks.
- Complete assignments from Dr. Pandey:
  - Learn about *C. elegans* online.
  - Search for “worm tracking” videos on YouTube.
  - Review *Nature* paper; get details of code.
  - Establish limitations of *Nature* paper software, and brainstorm list of improvements.
  - Begin collecting graphic algorithms, sharing, and learning OpenCV.
- Install OpenCV on personal computers.
- Download “Learning OpenCV” e-book from Colin’s e-mail.
- Create website for project.

## Pending:

- Pertinent lab users to be added to listserve.
- Team roles need to be decided.
- Get access to lab by sending full name, e-mail, and university ID number to Dr. Pandey.
- Finalize meeting time.

## Individuals:

### Colin:

Although our group meeting wasn't until Friday, I went ahead and began to prepare myself for the project. I knew that we would be using computer vision algorithms to analyze pre-recorded video, so I installed the OpenCV, which wraps many useful CV algorithms in a software library. I also ordered a book on OpenCV, and began getting familiar with the library on my home computer. After our first group meeting, it became apparent that not all of us were familiar with OpenCV or

the C++ programming language. I found a PDF OpenCV tutorial and emailed it to the rest of the group along with links to a few useful C++ tutorials. During the meeting, professor Pandey pointed us towards an article that was published recently on advanced CV techniques for tracking C. Elegans. I located this article online and downloaded the open source software package in order to better understand the current state-of-the-art.

### **Laith:**

We meet our adviser Dr. Santos Pandey. Then we took a tour around the lab the we will be working at, also Dr. Pandey gave us an introduction about the project. We also chose roles I got assigned the webmaster role.. I got assigned the webmaster role. Started learning OpenCV.

### **Ryan:**

I attended our first meeting (see summary above). I took on some preliminary communication necessities by creating the e-mail listserve and adding appropriate personnel. I also created the weekly report template and first weekly report. I also brushed up on my OpenCV by grabbing my old O'Reilly OpenCV book and got it reinstalled on my computer. In addition I have begun to do the things Dr. Pandey asked of us, such as watching YouTube videos about worm tracking and perusing the paper from *Nature*.

### **Shusheng:**

Read the articles about C. elegans and prepare for learning the software of Open CV.