Project: Intelligent Pattern Recognition of Moving Organisms

Advisor: Santosh Pandey

Weekly Report #9, Group 03: 3/26/2012 Accomplishments

- Completed initial Design Document.
- Discussed and restructured our software architecture based on knowledge gained from Prototype A.
- Began implementing Prototype B.

Plans

- Continue to familiarize ourselves with C++ and OpenCV.
- Review and redesign based on successes and failures experienced while building Prototype A.
- Implemented Prototype B.

Pending

• Get in touch with our respective ECpE 492 groups to review their work.

Individual Contributions

Sam - 6 Hours

• In this week, we had two meetings. And discussed how to updated the project plan. I updated the project plan about centroid finder. I also updated the centroid finder class. Added some new function to it.

Shusheng - 4.5 Hours

• I worked together with my paterner to solve the centroid finder problem. I try to get the jagged data and fix it to be the raw data which other member can use them to get the actual location of worms' centroids. It has not been finished yet and I will continue work on it.

Colin - 6 Hours

• This week I continued to experiment with different methods of background subtraction. I completed a crude implementation of the Codebook method in C, and have begun to refactor that into a C++ class.

Laith - 2 Hours

 This week we have defined some of our class hierarchy as a group and broke the work to several parts. I am currently working with Shan on an improved centroid finder that will find the nearest neighbor when a collision occurs to keep track of the desired worm. Also I was reading about studies on identifying the tail from the head.

Ryan - 5 hours

• I've focused a lot on thinking about our large-scale architecture, and trying to figure out what mistakes we made on our last prototype, and how to improve our overall design. I also con-

tributed this to our design document. I spent some time helping groupmates with some of the conceptual basis for our tracking algorithms as well. Lastly I proofed and submitted our design document.

Group Member	Hours Contributed
Sam	6
Shusheng	4.5
Colin	6
Laith	2
Ryan	5