

## Proteus – Project Progress Report – Week 4

### Summary

This week was largely spent on getting a development environment and the corresponding infrastructure established as well as writing first chunks of code for the interactive annotation framework. Progress was slowed down by a number of expected and unexpected factors, but is mostly within the plan.

### What I intended to do

I intended to get the framework for the video annotation facility in place, i.e. familiarise myself with Qt, link it up with libavcodec and get to the stage of having a framework that can load a video and display individual frames.

I also intended to read up on some literature, specifically the Hartley & Zisserman book, the Debevec paper and the second Pollefeys paper.

### What I ended up doing

I have a working framework that can open any video in a format supported by libavcodec and extract image data on a per-frame basis. However, the buffering is currently very rudimentary and the performance appalling, and I can only get the first frame displayed. However, a vast amount of time went into setting up the environment to develop in, which is now done, so that I have a workflow for an efficient code-debug cycle.

Due to having 4 supervisions, my family coming to visit and getting a bit ill, I didn't manage to do the reading I intended to do, but I bought the book and had a brief look into it. I am planning to catch up on the reading this week.

### Where I am in the timetable

Slightly behind on the completion of the November 7 goal of having a fully working annotation framework, but should be able to catch up on that. Lagging behind on the reading, hoping to catch up on it this week.

### Problems/Issues encountered

There was a lot of complication in getting the integration of Qt into Eclipse working (especially as, unhelpfully, one of my machines was running Qt 4.3 from Ubuntu hardy,

while the other was running Qt 4.4 from hardy-backports, which I only discovered on Sunday); linking against the libavcodec library from this environment turned out to be rather fiddly due to my lack of experience with the CDT/Qt development environment in Eclipse. I didn't have enough time to do the reading due to time mismanagement and spending too long on supervision work, then losing much of the weekend due to my family visiting and me subsequently getting ill.

## **What I intend to do**

Hopefully recover my health so that I'm not tied to bed in the afternoons; otherwise, I am intending to focus on reading and making improvements to the framework I've got. Since some of the difficult bits of the video decoding part of the framework are now working, I should be able to try to meet the coding target for Nov 7 (although some consideration needs to be given to efficient buffering so that I can support HD resolution video). If I can get most of my time in the second half of the week to do reading, I should hopefully be able to catch up on that as well.

## **Further remarks**

None.