

## CS5245 Project Progress Report

### What should have been done

According to our original timeline, by now we should have a complete video sequence to work on and start animating the creature.

Week of 6 Sept: planning the teacher's movements, mock-up video shooting, finding actors, and casting

Week of 13 Sept: real video shooting, getting used to Maya and After Effects

Week of 20 Sept: animating creature

24 Sept: project progress report

### What have been done

In reality, we only have a partial video sequence and we have not decided what creature model we are going to animate. In other words, we are one week behind our original timeline.

The main reason is the difficulty to find a suitable location for shooting. We finally have found a good enough location, but we have not yet found supporting actors as figurant students. Since we have no supporting actors, we could not shoot wide angle shots. Nevertheless, we have most of the sequences which will contain our special effects.



Over-the-shoulder shot. This shot links the beginning of the video with our special effect in the middle.



Morphing shot. The teacher's reflection will be morphed into a creature in this shot.



In this shot, the teacher's reflection will still be a creature. This way, we will be able to show an interaction between the creature and its environment.



The closing shot. In this shot, the teacher's reflection will be a natural reflection.

About the model for the creature, our main problem is finding a ready to animate high-poly 3D model.

## Morphing

For the morphing effect, we will use a freeware application WinMorph<sup>1</sup>. The morphing algorithm used is based on the paper Feature-Based Image Metamorphosis<sup>2</sup>. The application takes two images as the input. Then, the user specifies a number of reference points and the correspondence between each pair of points. Based on this information, the application generates the morphing frames between the two input images. We give an example of morphing sequence below.

---

<sup>1</sup> <http://www.debugmode.com/winmorph/>

<sup>2</sup> T. Beier and S. Neely. "Feature-Based Image Metamorphosis." Proc. SIGGRAPH. 1992. The paper is available online at <http://www.hammerhead.com/thad/morph.html> without the colour pictures.



(i)



(ii)



(iii)



(iv)

The morphing example. (i) and (iv) are the input images.