

Katie Bora

Math 198

September 28, 2014

Pre-proposal:

For the past two years, I have been a member of the UIUC Fencing Illini. For my math project, I am going to create one of the most basic and important moves in fencing: the advance lunge. This attack, while at its surface can seem simple, is actually quite complex, and in a bout, it can be difficult to properly execute.

I will use V-Python to create an animation of a fencer in en garde. The fencer will then advance and extend into a lunge. Depending on how well I am able to use V-Python, I will possibly have the fencer retreat back into the en garde position. Being a novice at V-Python, it may be wise to borrow code from past projects and adapt it to make it my own. I will have to manipulate the puppet figure and the weapon into a proper en garde position, have it advance, extend its arm and weapon, and lunge.

It would be exciting if I could manipulate the size of the advance/lunge and the speed of the action. If my project needs to be made more challenging, I could always add in another fencer and demonstrate how the blade of the weapon bends or curves when it hits the target area on the opposing fencer.