Exercise 3 – Motion Capture Advanced

Goals:

This assignment will focus on the student becoming familiar with planning a capture, capturing, and cleaning/using data appropriately. In addition, there will be action that interacts with either a static object or another actor. This will require a motion capture session using Blade software. The data then must be processed and taken into Motion Builder. Finally the captured data will be used to produce a finished animation (using Maya or Houdini). This will allow the student to become familiar with the pipeline for motion capture, from initial captured data to final product. In addition, advanced finessing of the raw capture data must be completed.

Requirements:

The captured data will be processed to produce a final rendered animation. The emphasis is on believability of motion. This should be a polished piece. This exercise will include an in-class presentation as well.

There must be a floor/ground surface with appropriate lighting of some kind to reveal shadows and foot contact.

In addition, please screen capture the raw data and include it as part of your mov file submission

The student is given a choice of:

- motion involving interaction with a static object (ie. table, chair, hurdle, etc)
- motion involving a two person capture
  There must be a floor/ground surface with appropriate lighting of some kind to reveal shadows and foot contact.

These are the minimum requirements.

Considerations:

If possible, using an original character, even a simple one, is preferable to a pre-made character, however badly rigged or badly painted weights will not result in believable results. If you do not have an already rigged character, re-consider. We will be performing the capture of motion in class and it will be your assignment to process and enhance this captured data through the tools of the pipeline we discuss. The capture for this exercise should be more complex than the previous exercises.

Submissions guidelines:

The exercise will be submitted as a directory, **S17_T326_E3_LastnameFirstname_Title/**
This directory should contain the following:

- the data files from the blade capture, resulting fbx, and maya .ma or mb file (or hip)
- **S17_T326_E3_LastnameFirstname_Title.mov** or mp4, compressed H 264 and should include raw data screen capture as well as final result

Important note: Adherence to these naming and format conventions constitutes 5% of your grade. This is the naming convention that will be used for all exercises and projects.

Grading:

Using the motion capture data and learning the pipeline from capture to finished product is the emphasis. The grading of this exercise is structured as follows. Meeting the minimum specifications, 80%. To move your grade above 80% go beyond the specifications, demonstrate

exploration and understanding. Creating an aesthetic piece is also part of the goal as well as motion that is integrated into a scene. Extension/enhancements could include two person or finger capture and so on.

Be creative, have fun.