

Adding movement and passion to the locomotive humanoids through dance.

## Capturing the Dance

This week saw a lot of progress for Team Anihccam. The week started with a meeting with director, Franco Sciannameo, in which the team was able to present their reasons for shortening the scope of the piece. As a result of this meeting, the length was cut down to 5 minutes, with the dance sequence being shortened to 2minutes. This was a significant change since it allows for a higher quality and more concise piece. With the scope shortened, a more realistic deliverable date is achievable. In addition, with a shorter scope a 3-D transformation from train to humanoid is also possible. The team worked together to figure out the best possible way to animate this transformation and in the end it was decided that a more organic change was preferable. The locomotives would unbend and various parts would become the necessary limbs for the humanoids, like a marionette puppet getting up to walk.

The end of the week saw the first tests with the Attack Theatre dancers and the Vicon system on CMU's main campus. This system was chosen because it offers cleaner data which in turn means less time needed for retargeting this data to the models. During the motion capture, various aspects of the story were discussed:

What can the humanoids use in the environment to help tell their story?

What movements and range of motion are achievable?

*How can the Flower Duet be used to tell a full story?* 

*Where would the transformation leave the dancers?* 

These questions were necessary in creating a dance that would impact the audience and have magical moments that would capture the overall theme of love transforming humanity. The music was edited to a shorter piece but that still offers a good interest curve for the dance. This test was used to experiment with the motion capture pipeline and determine a feasible schedule for everyone involved.



Figure 1: Attack Theater Dancers testing the Vicon System