

6.111 Final Project Abstract

Jess Barber and AJ Meyer

October 29, 2007

For our project we are planning to create a simple two-dimensional augmented reality system. In the most basic form, when a white index card with a symbol on it enters the field of vision of a video camera, the system will recognize the card's position and orientation by using the symbol and will "affix" a predetermined image to the card. This will be output to a video display, with the effect that the predetermined image is printed on the index card in reality; that is, the index card can be moved around, tilted, etc. and the image will still appear on it at all the proper angles and orientations.

Once this basic functionality is implemented we hope to try some improvements such as recognizing the index card without any identifying mark, applying images to multiple index cards, allowing these index cards to overlap in some way, and perhaps if we get really ambitious towards the end, adding in some kind of simple three dimensional structures.