

Friday, June 25th 2010

Week 6 Assessment: Daniel Kennedy

Two main areas of interest:

- continuing coming up with ideas for applications for the device
- giving the device a frame of reference

Frame of reference:

- plan to solve the problem using vanishing points:
 - find the vertical vanishing points in an image using vertical parallel lines
 - once the vertical vanishing points are found, determine their rotation from 'true vertical'
 - repeat on an orthogonal camera to the first and we can estimate the device's starting rotation

Application for the device:

- want to consider a 'social' application to the device
- the device is very practical for creating a 'hybrid reality' or 'hybrid spaces'

Physical reality

Virtual reality



Hybrid reality

Application for the device:

The idea: City Painting

The users would use the device coupled with their cell phones to create a virtual world painting on a static object in the physical world (hybrid reality).

The painting can then be viewed by other users through the phone's camera linked to the server that would superimpose the virtual image onto the physical image (augmented reality).

The users can use the grafitti either to leave messages or to show off their artwork and can choose the level of privacy (ie personal, friends only, world)

Uses of the device:

- the device would be used as a pointer:
The user would use the device like a spray can to direct the 'spray' of paint
- the device would monitor translation and rotation to determine the spray of paint
- the user can use the phone camera to determine where to paint and also to change color, spray strength, spray spread...