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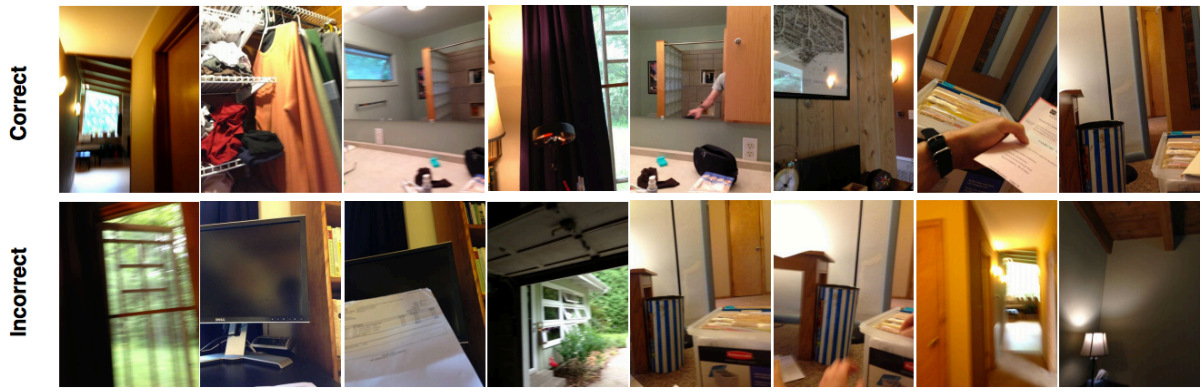
DES 157

For my research into diminishing and augmenting reality, I came upon 2 projects that I found were relevant. The first was an application called “PlaceAvoider.” This application is intended to read live feed and “blacklist locations from visual storage and sharing by matching the visual signature of a location against images of locations the user has designated as off-limits”. This way, the user is protecting personal space from what a live camera feed may pick up. This applies to cases in which there may be malware on hardware that could pick up any personal information from a live camera view.



(image taken from pg9 from PlaceAvoider abstract)

The program utilizes GPS to determine the general location, to see if you might be in an area that contains personal information. Images of each room are taken, and the local features are considered and classified as identifiers of the space. The interface for this project is simply the live video feed.

Another project that I looked at was “Augmented Reality with Processing” utilizing the NYartoolkit.

(image taken from CAN augmented reality tutorial)

Via live video feed, the program is able to recognize “markers – black and white images – to determine the three dimension position and orientation of [opengl objects] in the real world”. This is a library for processing. This library allows you to create your own markers and code the program to recognize them.

PlaceAvoider and the Augmented Reality with Processing interfaces are similar in their usage of live video feed with no visibly designed interface. Both programs share the ability to analyze live feed to recognize where to place their augmentations / diminishing effects, the difference being in NYartoolkit’s pre defined shapes that are utilized to create hot spots for appling openGLs, versus PlaceAvoiders’ raw feed analytics.

Both of these projects are similar to our concept from their utilization of raw feed, although our concept of applying visuals to the stream of video may differ. It is interesting to see markers being utilized as ways to signify where to apply graphics, and that may be useful to specifying areas where to apply visual noise. The room analysis seems to be too advanced to achieve within this time period, and I see the markers being a step towards having a program that recognizes general objects based off of live feed.

http://www.cs.indiana.edu/~kapadia/papers/placeavoider-ndss14.pdf

http://www.creativeapplications.net/processing/augmented-reality-with-processing-tutorial-processing/