Becca Arvanites and Cristina Domnisoru

Final Project Abstract

For our final project, we are implementing real-time processing of video input from a camera to create interactive mini-games. The player will see a digitally processed picture of themselves on the screen, and their actions will be incorporated into the game environment. Some of the effects we plan to implement are making the player appear on ire, making the player disappear into the background, deforming the player, changing their color etc. We will be using edge detection and motion detection to determine the player's actions in the games. We will implement multiple mini-games where the player has simple tasks such as catching falling objects, staying still to hide and moving to appear, putting out fires or hitting targets. The goal is to develop a library off interesting digital effects that can be applied in real time and a collection off games that a player can be visually incorporated in using the digital effects.
Becca will be working mostly on developing the games and Cristina will be working mostly on generating the visual effects.