**OF MICE AND MEN**

Max Greenwald ‘17

For my project I created an interactive gaming experience in which two participants play each other virtually and physically, chasing one another in arena. One player, the evil cat, is on a computer and chases a virtual mouse with his or her arrow keys. The other player, the innocent mouse, enters the motion capture arena with a motion capture wand and avoids the evil red light chasing him or her and tried to get to the green lights (the cheeses) before losing.

My project explores how human emotion changes behind the computer screen and examines whether we act differently knowing that there are consequences to our computer actions.

Some of the artistic challenges I faced were how to feel like you're in a retro video game, how to portraying good vs. evil in a game setting and finally how to indicate whether you're succeeding or failing in the game (and feeling like the cat or the mouse)

Some of the engineering challenges I faced were how to connect a computer to a lighting and motion capture area and minimizing data transfers and smoothing data to make it real time and constant. How to get the virtual mouse shoes to walk smoothly and according to one's directionality. How to map the large motion capture area to a smaller computer screen area. How to create programmatic logic jumps between blocks (when you press down you go from 9 to 15 not just over 1 block). And finally how to use the intensity of light to display game state.

I knew how to do some coding but had never done anything so visual before and with hardware. This is the first game I’ve ever created and had to consider levels and winning and losing - I had to make it hard enough to be fun but easy enough such that everyone could grasp it. This was a great opportunity to turn something I love (software engineering) into something REAL and live.

In this piece I attempted to gamify reality and realit-ify a game. An attempt at creating a transformation, this game takes the person controlling the computer and a computer controlling the person and tries to fuse them real time. An interesting feedback loop is created by transforming movement to visual representation on a screen which changes to reality of a real arena with the lights. This project energized me to be a maker and a doer and for that I am thankful.