Project 1 Documentation

URL: <https://people.rit.edu/cgh2166/Project1/index.html>

**Overview**

My project takes various pieces of art and uses them as a blue print for cellular automaton. Each piece of art is broken up by a grid and filled with active cells based on it various color. Each color exists as its own layer and is unaffected by the active states of other layers. The more prominent colors of each artwork exist as the base layer of each animation. This allows colors of little dominance to remain present in the final work.

My project contains 10 galleries of art. I selected the first 5 artworks based on there abstract and minimalistic art style. They are dominated by strong, present colors that fit easily into the cellular grid. They are spacious and provide a very smooth transformation. You will easily identify the final works with their originals.

The second set artworks are much more detailed. They feature artworks from many different eras. The idea of this second set was to push the boundaries of this cellular automaton and provide a largest scale of detail. These artworks often feature dozens of colors. To maintain some sense of order I scaled down the number or layers to four at max. This allows the layers to be clean and readily identifiable. To maintain authenticity, I averaged the color values of each painting to find color sets that best represented the works in their entirety.

**Specs**

If an Active cell has 2 of more active cells next to it, it will deactivate and add active states to all cells touching it.

In my version of cellular automaton, a cell will not clear after its initial seed. If a cell was colored active, then it will remain that way unless painted over.

The background is black to avoid washout from a white background. Many artworks feature white colors and would be diluted by a white background. The black background is nex best neutral color.