Vissynth Project Proposal

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Our group would like to design a program that functions as a visual synthesizer. We intend to take input from a web camera and use this input to drive a musical synthesizer. To achieve this, we will separate the image into a grid, which will roughly correspond to the grid of a synthesizer: an array of buttons, where columns represent "time steps", every ON button in each column goes off at the same time point, and the rows represent frequencies, with lower rows representing lower tones and higher rows representing higher tones. The program will decide which squares of the grid are ON and which are OFF based on the following process:

1. turn the contrast all the way up on the image

2. count up the number of white and black pixels within each square of the grid

3. for each square, mark that square as ON if there are more white than black pixels, OFF otherwise.