

Turning Pictures Into "Music"

By: Robert Gray

Basic Overview of Program

- Forms sounds based on location and amount of colors in picture.
- Makes very strange almost random sounding sequences of three note "chords". There is some method to the madness, which I will try to demonstrate

Program structure

- Asks user to choose a picture (.jpg)
- reads image -> reshapes to 256 x 256 image -> separates into rgb components-> quantizes image (32 x 32)
- Assigns frequency values to each quantized/averaged block of color
- Generates sine wave with each frequency block

contd.

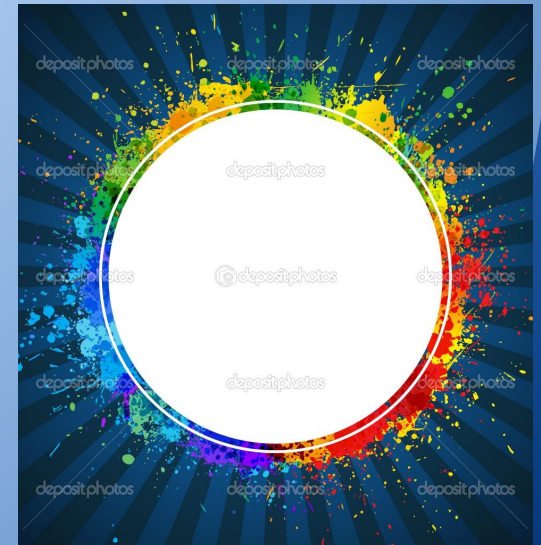
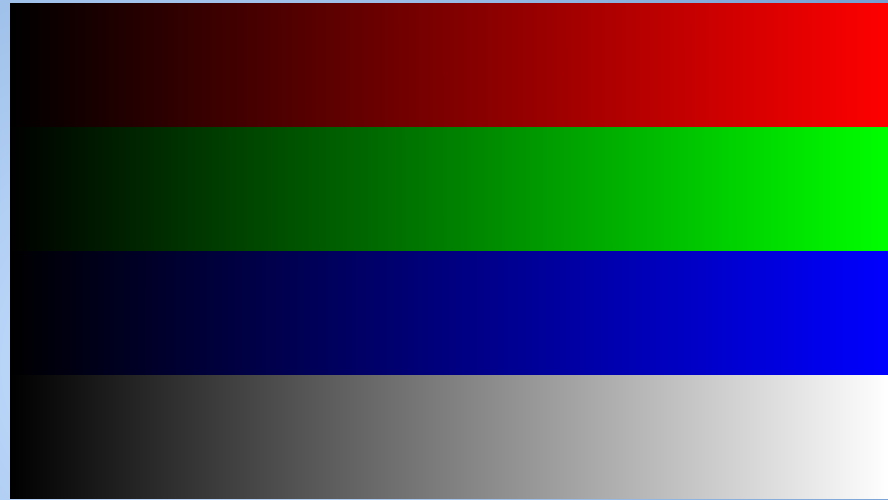
- Adds all red blue and green waves together
- Outputs sound and .wav file saved to disk. Sound is from wave form of sine functions vs. t
- Outputs 104 seconds of noise, comprised of 1024 (32x32) individual chords in sequence

Problems I Encountered

- I was not as good at matlab as I thought I was.
- white noise problem -> fixed with quantization (really hard)
- "for" loop problem. only output noise of last pixel in array (whoops)
- Getting the timing and sampling correct
- Could not get feature/edge detection like I had hoped due to white noise problem

Pictures Good for Demonstrations

(brace yourself)



Thank you!
I hope your ears recover
someday