

Philip Galanter

Artwork: ChromaVox



Topic: Fine Art

Authors:

Philip Galanter

Texas A&M University
Department of
Visualization
USA

<http://www.viz.tamu.edu/>

References:

[1]

<http://philipgalanter.com>

Abstract:

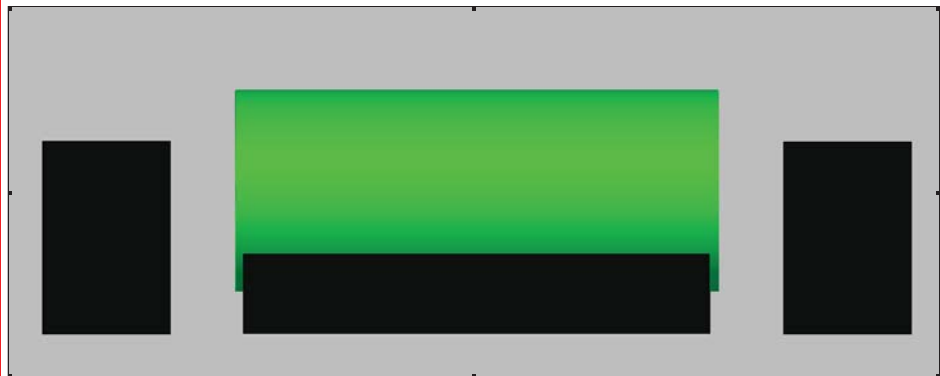
This is a work currently under construction and planned for completion at the end of October. It will require a plinth or other elevated stand about 80 cm square as well as 3 electrical outlets.

The work consists of 4 parts First there are two small audio speakers each about 15 cm tall and 10 cm wide. There is also a small 4 cm cube used as a color sensor. Finally there is the light unit about 20 cm tall and 45 cm wide. It consists of a glowing cylinder on a dark base.

The piece can run in an automatic or interactive mode. In interactive mode the visitor can place the color sensor on provided color samples or something they may have with them. The color sensed then slowly fills the light unit. Based on the color a generative system runs that produces 3 electronic-sounding voices that sing human-like phrases.

The music changes in tempo, register, and key depending on the color displayed. In particular, in the light unit there red, green, and blue LEDs that can be mixed to produce any color. Each is defined by 8 bits of color producing so-called 24 bit color. Those same 8 bits can be used to define the rule set for 3 cellular automata.

In this way the singing of the 3 voices corresponds to the 3 primary color components shown in the lamp.



ChromoVox planned construction

Contact:

galanter@viz.tamu.edu

Keywords:

Light sculpture, cellular automata, microcontroller