

Map mop

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ABSTRACT

This submission proposes a music performance to be delivered by the author on a multi-touch tablet. The piece is based on a collection of sounds generated using various analog devices. The collection is presented as an interactive visualization. The interface is projected, so both the collection and the performer's actions are readable to the audience.

1. PROJECT DESCRIPTION

This piece explores the use of "sound maps": visualizations of sound collections generated automatically from audio analysis. An example is shown in Figure 1. The maps use content-based audio analysis for visualizing each sound and also for arranging the layout. The technology will be described in detail in the associated talk at the conference. A multi-touch tablet is used to play a map. Touch actions trigger sounds. Recording of these gestures result in autonomous agents that navigate the space. The interface is projected, making the performance readable in the tradition of live coding. For this performance, the material is created from various DIY analog devices focusing on circuit bending and chaotic behavior. Such devices create very interesting sounds, but they are, by design, very difficult to control. So for this piece, a large quantity of sounds is produced in advance, then the map is used a control interface.

2. TECHNICAL REQUIREMENTS

The performance is executed on an iPad tablet, which needs to be connected to both a stereo PA and a projector. The proposed setup is to use an HDMI adapter and HDMI audio extractor provided by the author. This will result on separated HDMI video and unbalanced audio signals. The later would be connected to a DI provided by the venue. Ideally the audience should be sat and the light should be dim. There should be a screen or projection surface, preferably on stage above the performer. A table and chair are required on stage. The expected duration of the set is 10 minutes.

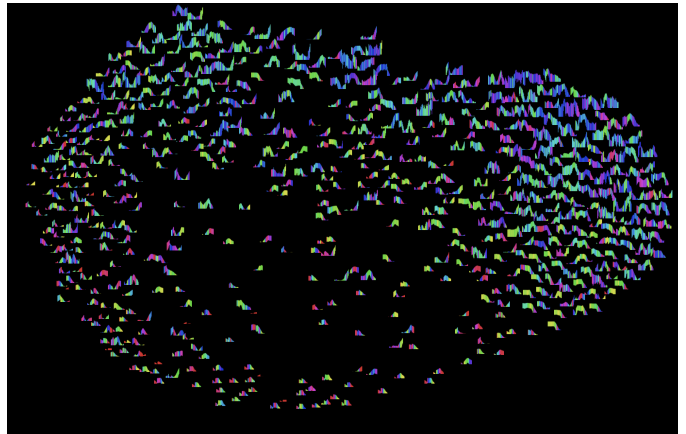


Figure 1: An example sound map.

3. DOCUMENTATION

The piece and associated technology are still a work in progress. Some recordings of the current state can be obtained from google drive: <https://drive.google.com/open?id=1wI2WXr70we0Q5bHE4KrrqM9QtEG29RHq>

4. ACKNOWLEDGMENTS

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