## **Cortical Fusion**

We basically outlined our project following the structure of our preliminary website:

## 1. Introduction

"Cortical Fusion is a multi-environment art installation exploring cross-sensory associations across populations ... [explanation of Synesthesia and Kiki-Booba experiment]

Cortical Fusion uses visitors as willing lab rats in a large-scale exploration of cross-sensory similarities across the culture. Walking through five different environments, the visitor explores their own synesthetic pairings of color and words; texture and music; shapes and symbols; light and sound ... [list of influential artists and projects] ... During the latter part of the journey, the visitor sees expansive visualizations of the months of collected data, tracking trends in synesthetic associations across the population. Through this, they gain an appreciation of cognitive experiences they share within the larger culture. At the same time, they see where some of their own sensory connections differ from the population at large, and may introspect on how their own personal and cultural background may have formed those individual associations."

## 2. Background

"Cortical Fusion is an artistic commentary on a neurological phenomenon known as "synesthesia" or the blending of the senses ... [extended description of Synesthesia] ... [kiki-booba effect which points to the fact that all individuals experience a certain degree of this phenomenon]

Artists have made reference to these sensory pairings since the birth of art itself. Poetry for instance, often relies heavily on metaphors and associations made between different emotions and senses. Similarly, the ancient genre of musical drama can be seen as an attempt to link sight and sound in order to convey feeling. [explanation of Alexander Scriabin and his piece "Mysterium"] ... [description of "Fantasia" and explanation of how it is a synesthetic piece]

Cortical Fusion sets out to expand on this theme, working tactile perception into the equation and literally immersing our audience members into a three-dimensional synesthetic environment, which records and reacts to people's actions within it ... [description of the Philips Pavilion to give context for the creation of a large artistic structure]

Likewise, the art of Cortical Fusion is deeply reliant on the viewer and his or her path within it. Attempting to demonstrate and create new relationships between sound, light, and texture, each experience of this work will be affected by which areas of perception our audience member chooses to focus on, and how he or she reacts to what is presented. Influence for individual sections within the work come various sources ... [list of these sources] ... Addressing the contemporary interest in surveillance and data visualization, viewers who enter the piece are tracked and recorded by the system ... [explanation of what we will do with this data and how we will put it on display]

In Cortical Fusion, we trace individual and group movements in order to establish connections between specific stimuli. In doing this, we hope to have formed an interesting addition to the long line of artistic pieces directly confronting and working within the blurred modes of perception with which we humans view the world. Additionally, from this mass of information, we hope to discover yet unknown correlations between stimuli.

## 3. Technical

A detailed description of each of the five sections of our work:

1. Visual Space 2. Rainbow Room 3. Sonic Zones 4. Malleable Space 5. Visualization Zone