

**TITLE OF YOUR REPORT**

Team Number, Team Name

New Mexico SuperComputing Challenge

Final Report

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Team Number: 32

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Team Name 1

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## **Can visuals affect the way people experience**

### **Executive Summary**

So, Our problem here was figuring out whether visuals affect the way people experience sound/music. The reason that we came up with this project idea was that I'm really into music and I wanted to make that into a project idea, so I brought it to my team and it turned out to be what we're working on right now! Along with this goal, we're also trying to create visuals that will go with the music we'll be presenting. The visuals have to line up with the sound that we're creating, so we still have a lot of work to do. Now, if we wanted to find the solution to this problem we were going to need to do research. At first, our team was going to do tests on the people that would let us, but then we realized that we could just look at the studies that other people did on this topic. In one study they used a machine called an FMRI scan. It was used to look at how their brain was responding to the music that was being played to them. The scientists played 5 different types of music, Rock, Classical, Jazz, Chinese Music, and Dubstep. In conclusion, their response to the music was based on the kind of music that they liked, so the solution to our problem would be more one-sided because since we're only playing one kind of music it'll be based on the kind of music that the audience likes.

## **Introduction**

### Problem Statement

So, Our problem here was figuring out whether visuals affect the way people experience sound/music.

## **Computational Model**

### *Selection*

Roblox/Starlogo Nova/ Scratch

### *Modifications*

none

### *Visualization*

Based on shapes and movement to music's rhythm

### *Limitations*

## **Problem Solving Method**

### *Verification*

### *Corroboration*

*Now, if we wanted to find the solution to this problem we were going to need to do research. At first, our team was going to do tests on the people that would let us, but then we realized that we could just look at the studies that other people did on this topic. In one study they used a machine called an FMRI scan. It was used to look at how their brain was responding to the music that was being played to them. The scientists played 5 different types of music, Rock, Classical, Jazz, Chinese Music, and Dubstep.*

## **Conclusion**

*In conclusion, their response to the music was based on the kind of music that they liked, so the solution to our problem would be more one-sided because since we're only playing one kind of music it'll be based on the kind of music that the audience likes.*

*Discussion*

*Future Work*

*Nothing.*

## **Acknowledgments**

**Frances, Noel, Ifesinachi, Chibuike**

## **References**

- 1.) <https://www.jameco.com/Jameco/workshop/HowItWorks/what-is-an-fmri-scan-and-how-does-it-work.html#:~:text=An%20fMRI%20scan%20is%20a,an%20image%20of%20the%20brain.>
- 2.) <https://www.strymon.net/relationship-between-sound-image-music-video>

3.) <https://www.hopkinsmedicine.org/health/wellness-and-prevention/keep-your-brain-young-with-music#:~:text=%E2%80%9CIf%20you%20want%20to%20keep,%2C%20mental%20alertness%2C%20and%20memory.>

## **Appendix: Code**