

under supervision of: Ong Kian Peng

by Kai Speidel N2400907K



## Introduction

---

In DM3009 Audio Visual Coding, we explored interactive and immersive sound/visual landscapes using TouchDesigner. The project aims to create an interactive visual experience that entices the audience to get lost in. Sound and visuals enhance the immersive experience by reacting to input.



## Concept:

---

The inspiration for this project came from the works of artists like Refik Anadol, who create immersive experiences using data and digital media. I wanted to create something that does not need a long introduction and creates a feeling of immersion. This concept evolved into an immersive experience, where each of the three screens subtly differs in its visuals. For me personally I created the three different projects with the notion of past, present and future in mind, but chose not to specify as I want to leave room for interpretation. Additionally, when documenting the project, I noticed that although the visuals were primarily black and white, they appeared in RGB in the images, which intrigued me. It brought attention to the idea that we are surrounded by frequencies and patterns that our eyes cannot fully comprehend, adding an additional layer of confusion to the experience.

In conclusion my concept resolves around three experiences at the same time, which are similar but different, the focus lies on immersion and getting lost in the visuals. The monotone music adds a hypnotic feeling to the experience.

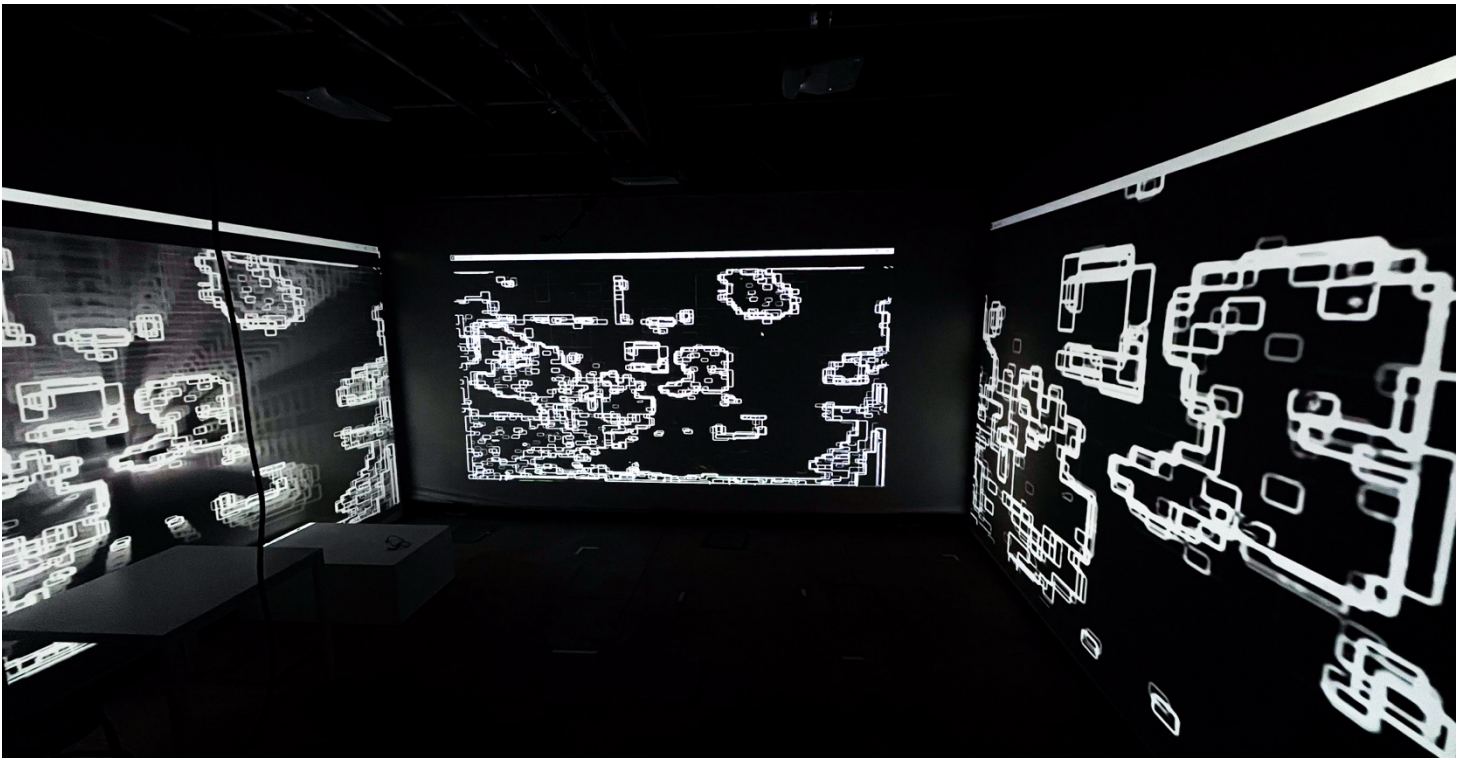


## Development:

---

The development process began with testing the visuals on a single screen, incorporating a video that would play in tandem with the sound. As the project evolved, I experimented with integrating a camera and webcam to capture motion, adding an interactive element that would subtly influence the visuals and sound. Through this experimentation, I discovered that small, gradual changes were more effective than quick, dramatic shifts. Rapid changes caused the program to overreact, creating a chaotic experience, while subtle alterations allowed for a more cohesive and immersive journey. This realization shaped the final interactive design, where the visuals and music work together to create a fluid, evolving atmosphere.

The input video undergoes alterations, including noise and pixel displacement. Multiple layers of filtering out patterns and adding noise create the illusion that the visuals behave autonomously. On a deeper level, they subtly react to motion and sound.









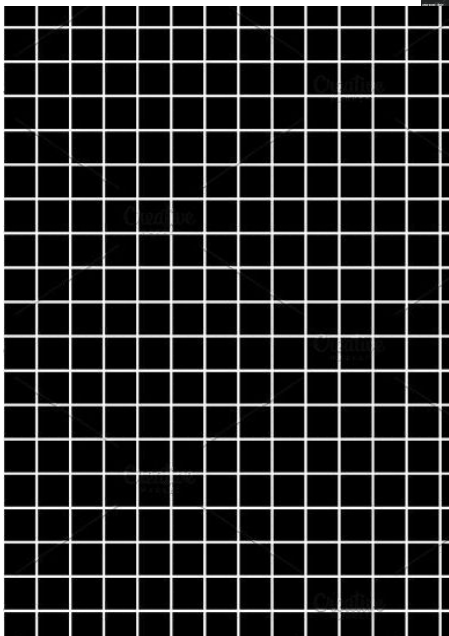
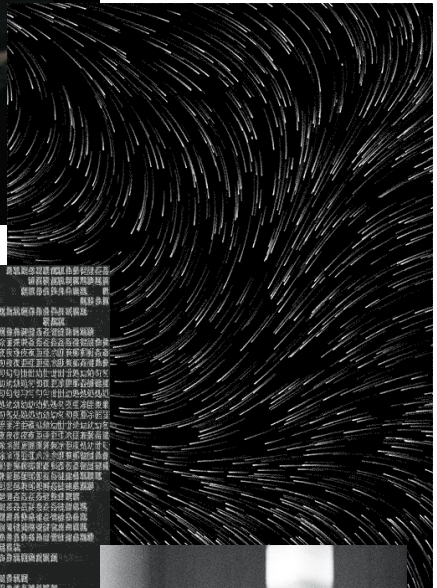
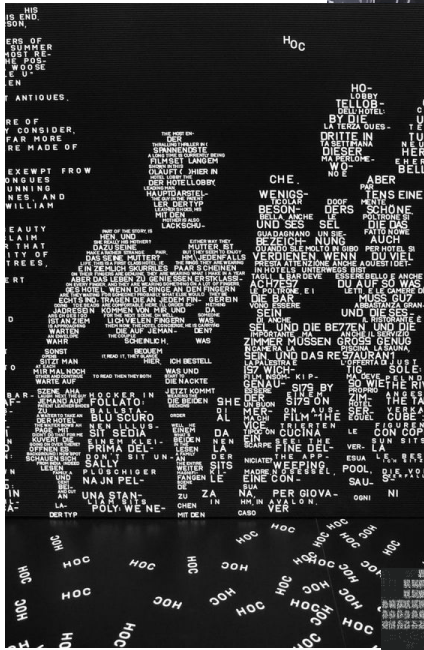
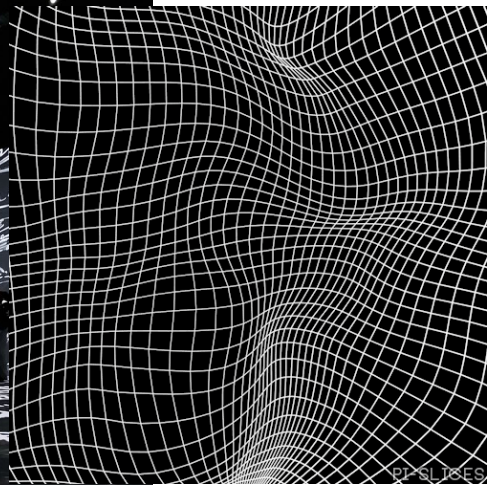
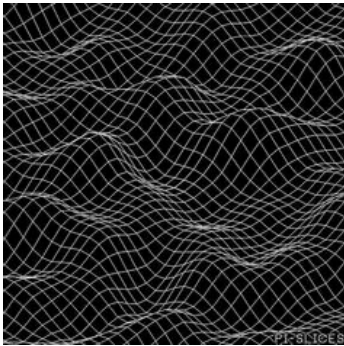








Mood board







## REFERENCES:

---

Anadol, R. (n.d.). *Refik Anadol* [Homepage]. Refik Anadol. Retrieved 12 November 2024, from <https://refikanadol.com/>

Berlioz. (n.d.). *Belioz homepage*. Berliozmusic. Retrieved 10 November 2024, from <https://www.berliozmusic.com>

*Five millimeters square white grid*. (n.d.). Retrieved 12 November 2024, from <https://de.pinterest.com/pin/764345368036175147/>

immersive art, M. (Director). (n.d.). *Digital interactive wall by design studio Büro Achter April—YouTube* [Video recording]. Retrieved 27 October 2024, from <https://www.youtube.com/watch?v=G2ptGCwDkVE>

*Pin page*. (n.d.-a). Retrieved 12 November 2024, from <https://de.pinterest.com/pin/8162843051423756/>

*Pin page*. (n.d.-b). Retrieved 12 November 2024, from <https://de.pinterest.com/pin/8162843051423756/>

*Pinterest*. (n.d.-a). Pinterest. Retrieved 09 November 2024, from <https://de.pinterest.com/>

*Pinterest*. (n.d.-b). Pinterest. Retrieved 11 November 2024, from <https://de.pinterest.com/>

*Pinterest*. (n.d.-c). Pinterest. Retrieved 12 November 2024, from <https://de.pinterest.com/>

*Pinterest*. (n.d.-d). Pinterest. Retrieved 12 November 2024, from <https://de.pinterest.com/>

*Pinterest*. (n.d.-e). Pinterest. Retrieved 05 November 2024, from <https://de.pinterest.com/>

*Pinterest*. (n.d.-f). Pinterest. Retrieved 05 November 2024, from <https://de.pinterest.com/>

*Pinterest*. (n.d.-g). Pinterest. Retrieved 05 November 2024, from <https://de.pinterest.com/>

Star, A. (Director). (n.d.). *Interactive Fluid Simulation—TouchDesigner + Kinect—YouTube* [Video recording]. Retrieved 20 October 2024, from <https://www.youtube.com/watch?v=PaJhKxqBh9o>

*TouchDesigner Documentation*. (2024, July 31). Derivative. [https://docs.derivative.ca/Main\\_Page](https://docs.derivative.ca/Main_Page)