



# RUINATION EXPLORATION

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Interactive Installation

## ***Ruination Exploration***

*An interactive experience exploring human destruction of natural environments.*

Looking to highlight the importance of cooperation and collaboration as tools to preserve and restore our damaged world, this piece explores the effect of human activities on three natural environments: forest, ocean and tundra. While these are certainly not the only environments effected by human development, they are key to our survival as a species and as a whole planet. The floor projection highlights what environment is being inevitably destroyed and the lighting in the columns serve to remind us to explore and understand our effect within our immediate space. By recycling the levels, you can infinitely preserve the space, but we are also aware that it is only together that we can facilitate real change.

## ***The Project***

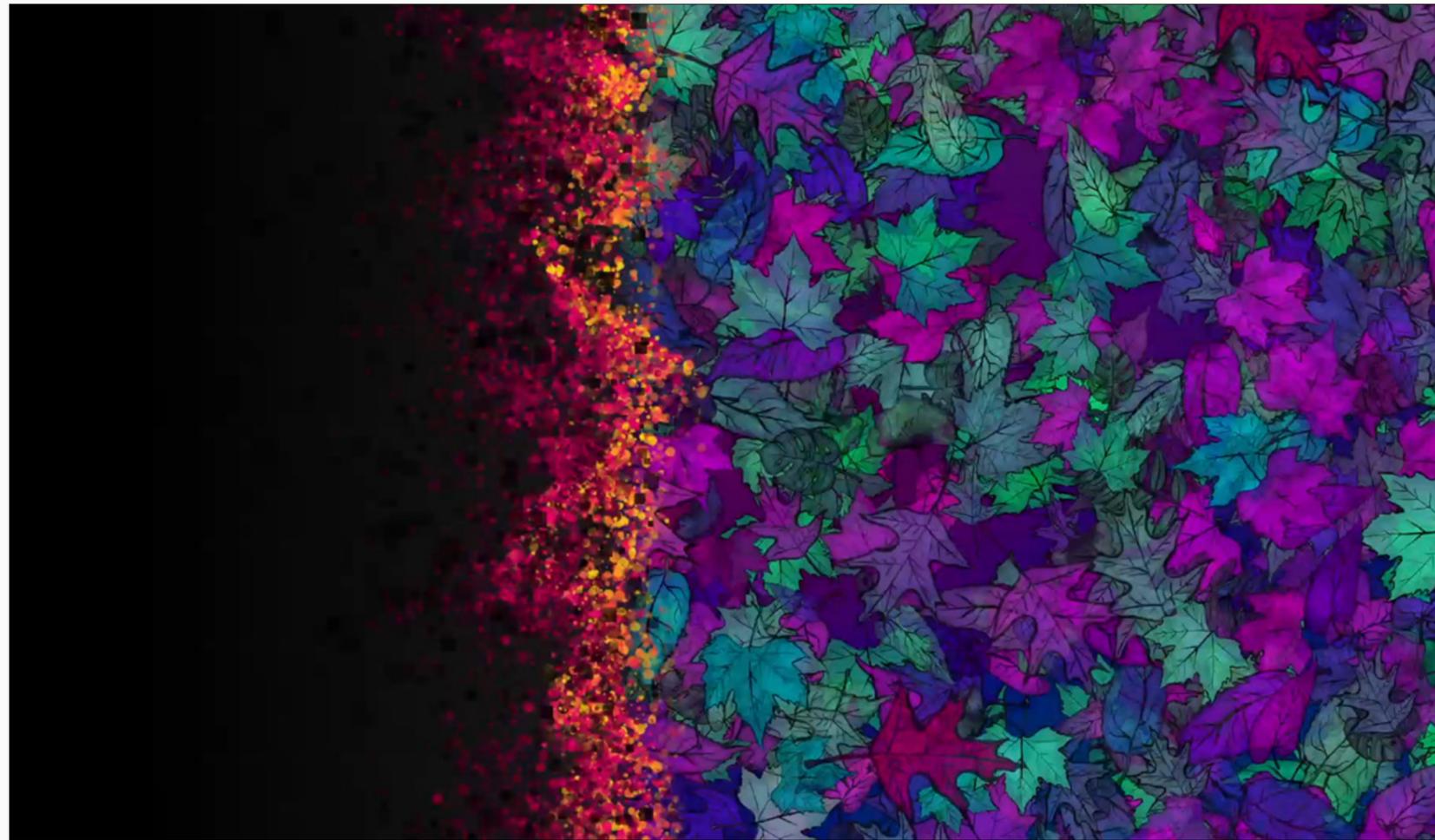
Using explorative interaction, our installation enlightens the participants to the inevitable destructive effect the human species is having on various environments. The installation experience features floor projection with animations, and also features five six-inch, round columns of varying heights. The floor projection features three different environment animations and is key for participants to understand their location, which is player controlled using Kinect. The columns serve to break up the space and also serve as additional lighting and reactive elements as we use the Kinect and Arduino to alter their internal LED lighting based on user proximity and the Unity programmed environmental destruction envisioned in the graphics. Exploration continues in a three environments loop until a player is caught by the destruction or leaves and the destruction covers the whole space. Upon “death,” the projection displays a new image, customized for each level, and a message about working together to preserve and restore our planet’s environments.

## ***The Narrative***

The narrative of each new environment in the game is that the space is slowly being destroyed behind the participant as they work towards the goal at the far end of the space. By reaching the end of the space, the participant is rewarded with the space resetting to the next environment and exploration begins again, with a new goal point and new chase destruction.

The chasing destruction takes different forms visually in each level, but ultimately serves the same purpose each time: firstly, illustrating the destruction of environments caused by humans and secondly, to entice the participant to naturally move to the goal. The destruction offers them the time to explore the columns, effecting the environment around them.

By combining these “gameplay” elements with the graphic elements and column lighting, we have created an intuitive experience that will hopefully illustrate the importance of understanding the human effect on various natural environments.



## ***The Forest***

Using floor projection of a bed of leaves burning away, we focus on destructive intrusion of humans into forest environments. This projection is reinforced by the floral user goal and the human feet represent our species at it's most basic. The whole environment is enhanced by the sound design of ambient forest noise changing to forest fire audio and the column colors dying. Column colors reflect tree trunks and glow brighter when participants are near them.



## ***The Ocean***

Using floor projection of shallow water being slowly filled with an oil spill, we focus on destructive intrusion of humans into ocean environments. This projection is reinforced by the water symbol user goal and the human feet. The whole environment is enhanced by the sound design of underwater ambience/gurgling and the column colors dying to black as the oil spill passes them. Column colors are reminiscent of seaweed and glow brighter when participants are nearby.



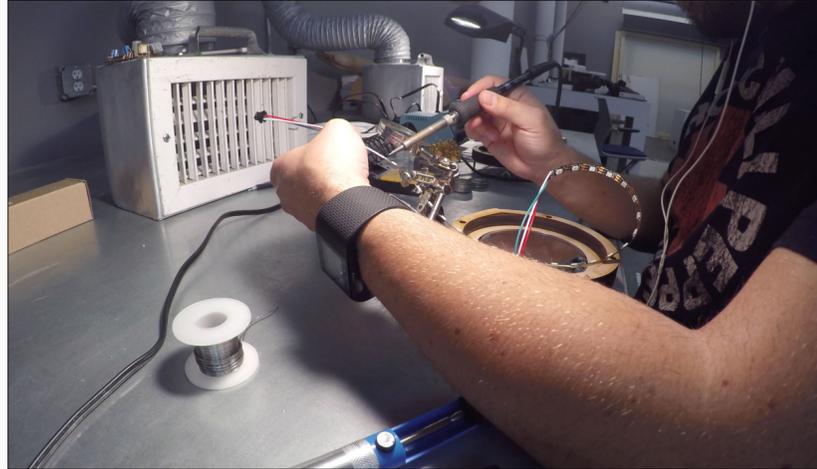
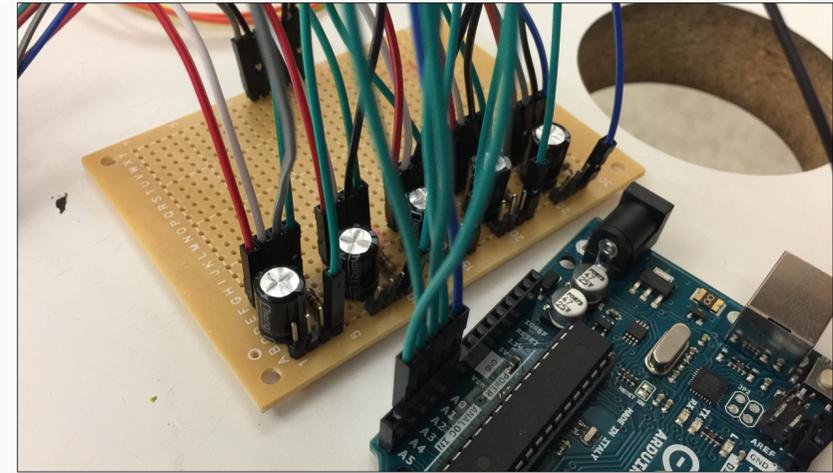
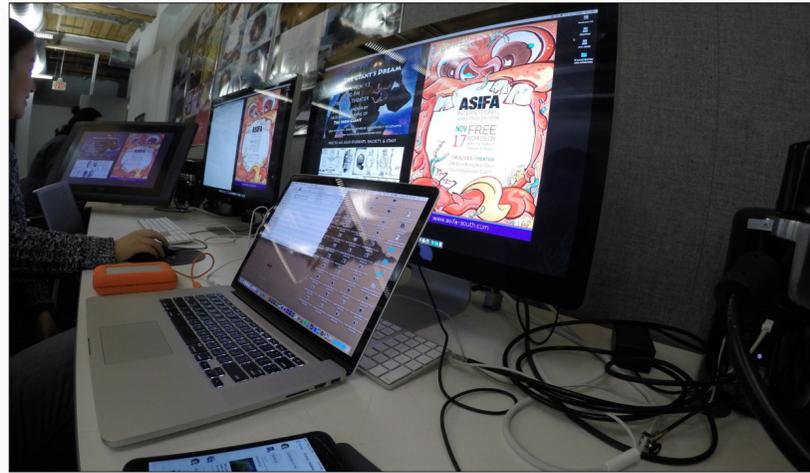
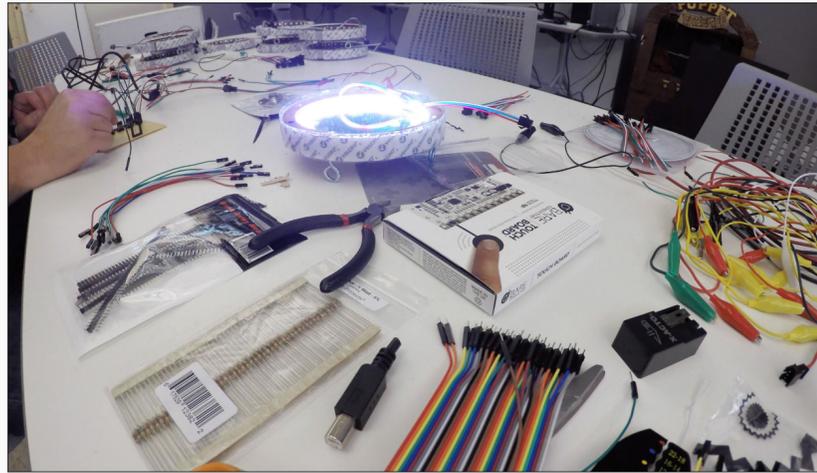
### ***The Tundra***

Using floor projection of ice slowly cracking and falling into an abyss, we focus on destructive intrusion of humans into tundra environments and broach the subject of global climate change. This projection is reinforced by the wind symbol user goal. The whole environment is enhanced by the sound design of wind blowing and ice cracking and the column colors dying to black. The column colors of grey and blue imply ice and brighten when participants approach them.

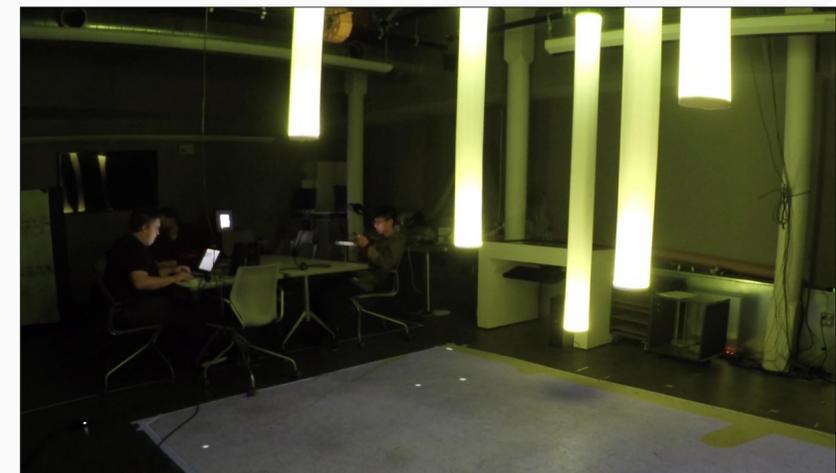
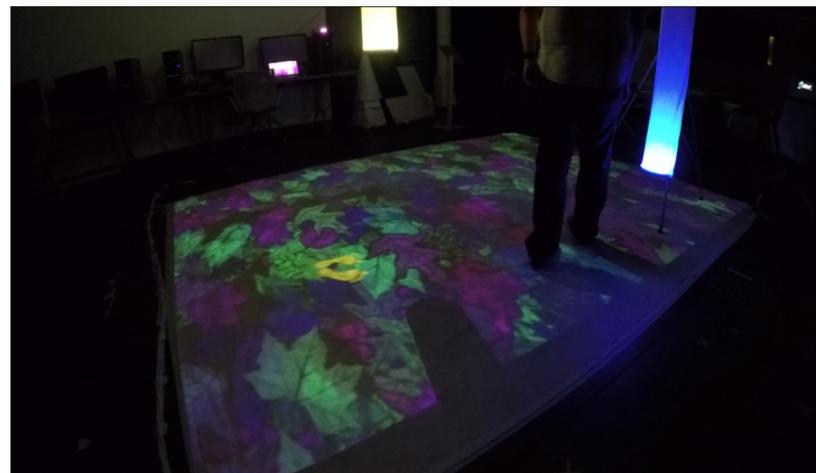
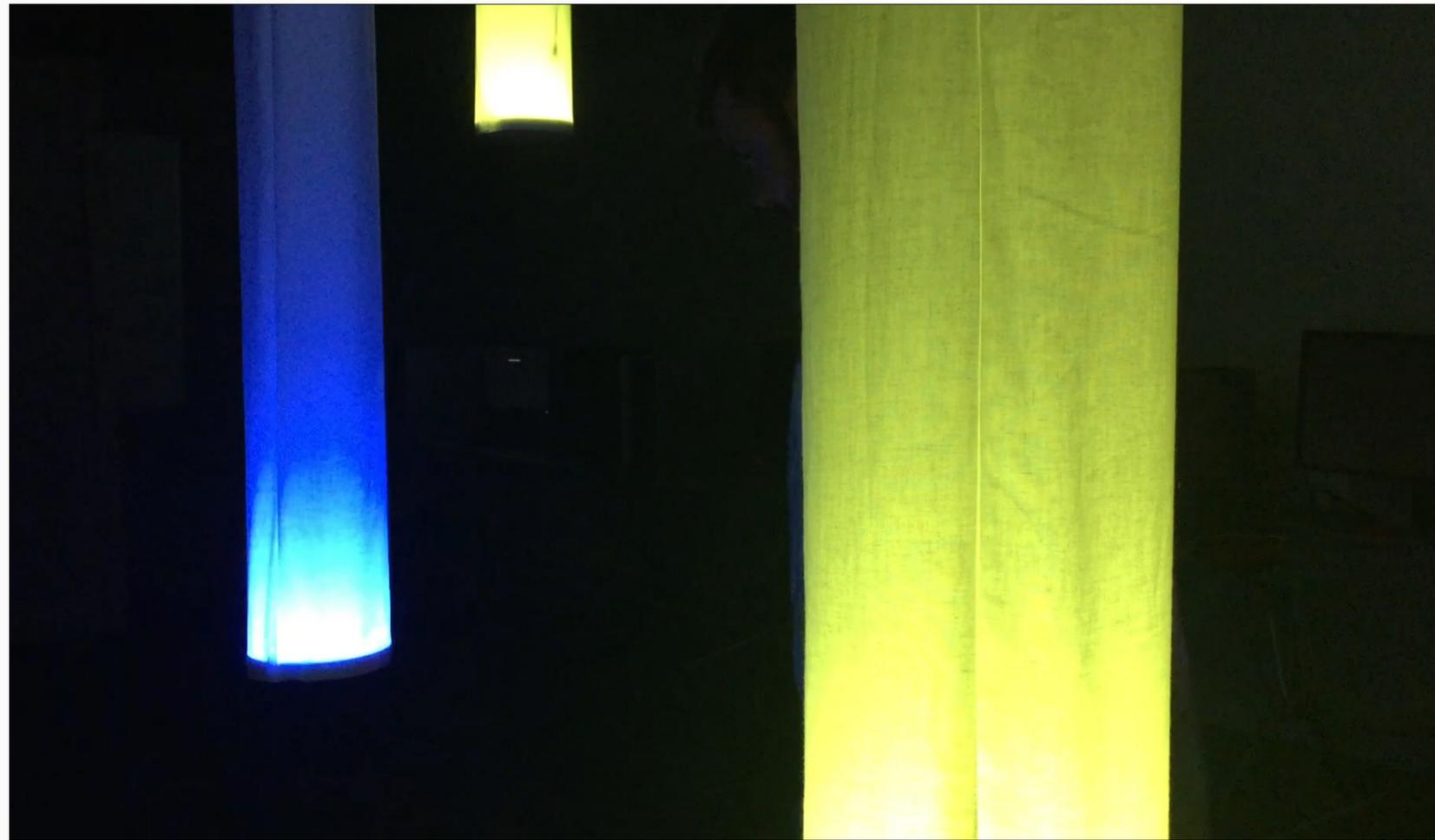
### ***Technology & Physical Interaction Description***

This installation uses the Unity game engine to drive the floor projections, sound and interaction. Using the Microsoft Kinect, we track the participant within the space and use their location to update the location of the player token in relationship to the destruction, columns and end goal. Columns are wooden rings with fabric walls and are lit with LED strips in the top and bottom ring. Each column is powered separately and controlled using an Arduino Uno. The Arduino board is connected to the Unity driven game using the serial port which allows Unity to control the column color and alter that color based on the location of the participant and the in-game destruction element. Users pass through the three environments by reaching the goals, thereby resetting the space to the next environment.

◆ CONSTRUCTION



◆ THE INSTALLATION



THANK YOU.