Project Overview

We are designing a system that is able to track visitors to the Gather-Ring, and then use their location to create a unique pattern that updates as they move around. We hope this adds a whole new level of interactivity for the community with this existing installation. We will be using an array of ultrasonic sensors installed underneath the benches pointing inwards to track the visitors.

Design Requirements

System Overview

Ultasonic Sensor Array

Controllers

Arduino Uno

Raspberry PI 3 Model B

LED Lights

Prototype

Tracking

Circuit

Pin Expansion

Algorithm

Controller Interconnection

Challenges

Conclusion