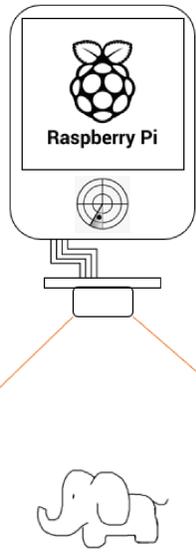


ZooTap

Project



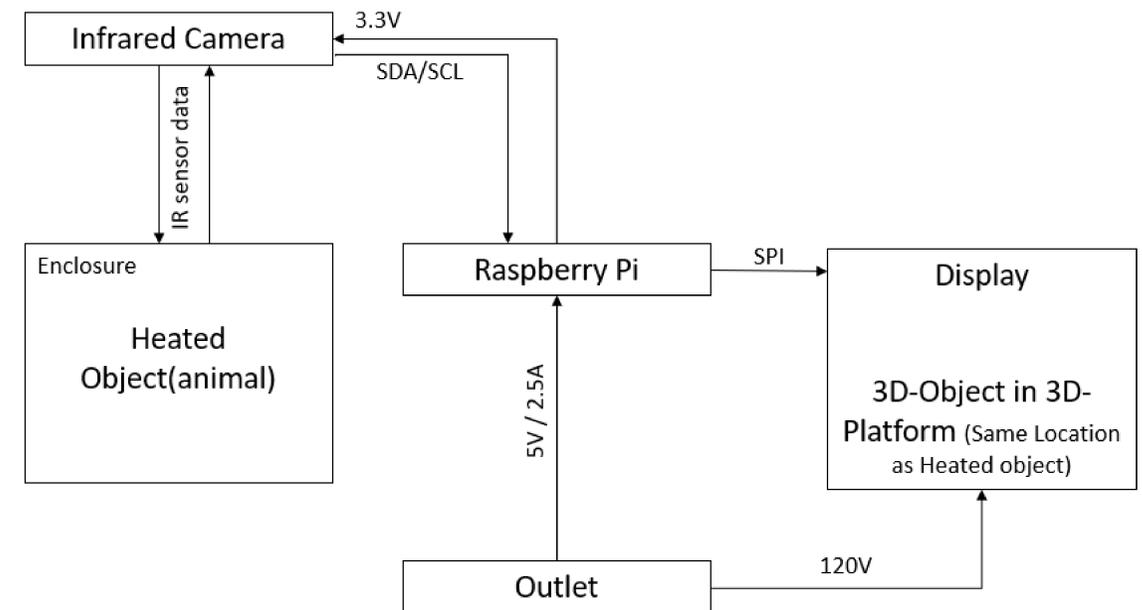
A day at the zoo can be stressful. ZooTap solves two of the biggest problems found at every zoo.

- (1) Customers not being able to find Zoo Animals
- (2) Zoo customers not staying at an exhibit for an extended period of time

With ZooTap, you and your kids will be able to interact with every animal physically and digitally with the use of a cell phone

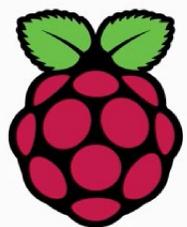
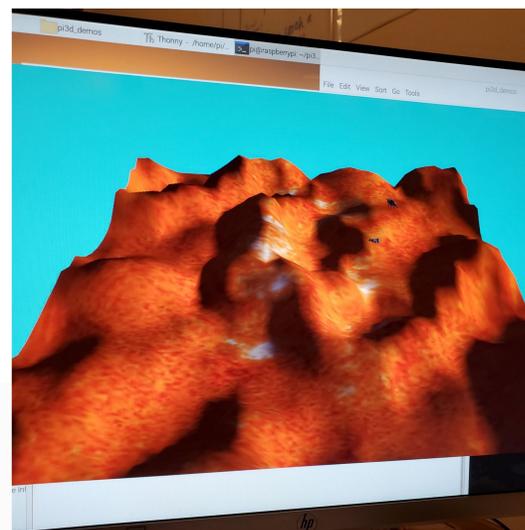
ZooTap will result in adults and kids being more involved in a single exhibit at any zoo. Aiding them in finding animals and causing them to stay at an enclosure for a longer amount of time

System



Methods

Using an IR camera and Raspberry Pi. Python code was arranged to show the position of an animal in approximate real time in a 3D landscape. This will provide an easy ethical way for tourists to locate zoo animals without disturbing them in their natural habitat.



Raspberry Pi OS

Conclusion

ZooTap is a user-friendly IR system used to locate animals in their specified enclosure. This simple design is a prototype of how ZooTap could be implemented in zoo's

With limitations of IR cameras (i.e., Reflections, depth perceptions, animals being close together, range of IR-Cameras), further research must be done to accommodate these problems while keeping the cost of this project at a minimum

This Prototype has the capabilities of being implemented on a larger scale to cater to multiple animals using multiple IR cameras. One futuristic Idea for this project is it becoming a QR code that can be scanned and used to take a user to a website where they are given location access to a specific animal in a zoo.