

# Journal 0

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## 1 Three Sentence Summary

Driverless car technology has a long way to go in terms of accident detection and ethical decision making. LiDar, cameras, and accelerometers provide accurate input data that will be fed into a recurrent neural network, as they are known for their time series functionality. This project aims to help further and refine research into this field by creating a self driving remote-control car.

## 2 What I did over the Summer

I decided to do a personal project where I created a Recurrent Neural Network to play Super Mario Kart. The project is still underway, but I learned how to work with and format time series data. I also learned of a way to use TensorFlow to export models to a localhost server, and this option could also be explored in my research project.

## 3 Materials

The following materials will be needed to complete this project:

- LiDar System
- High Resolution Camera
- Accelerometer
- Radio Controller
- Remote Control Car
- Arduino Microcontroller