

# Remote Control Car Laser Tag

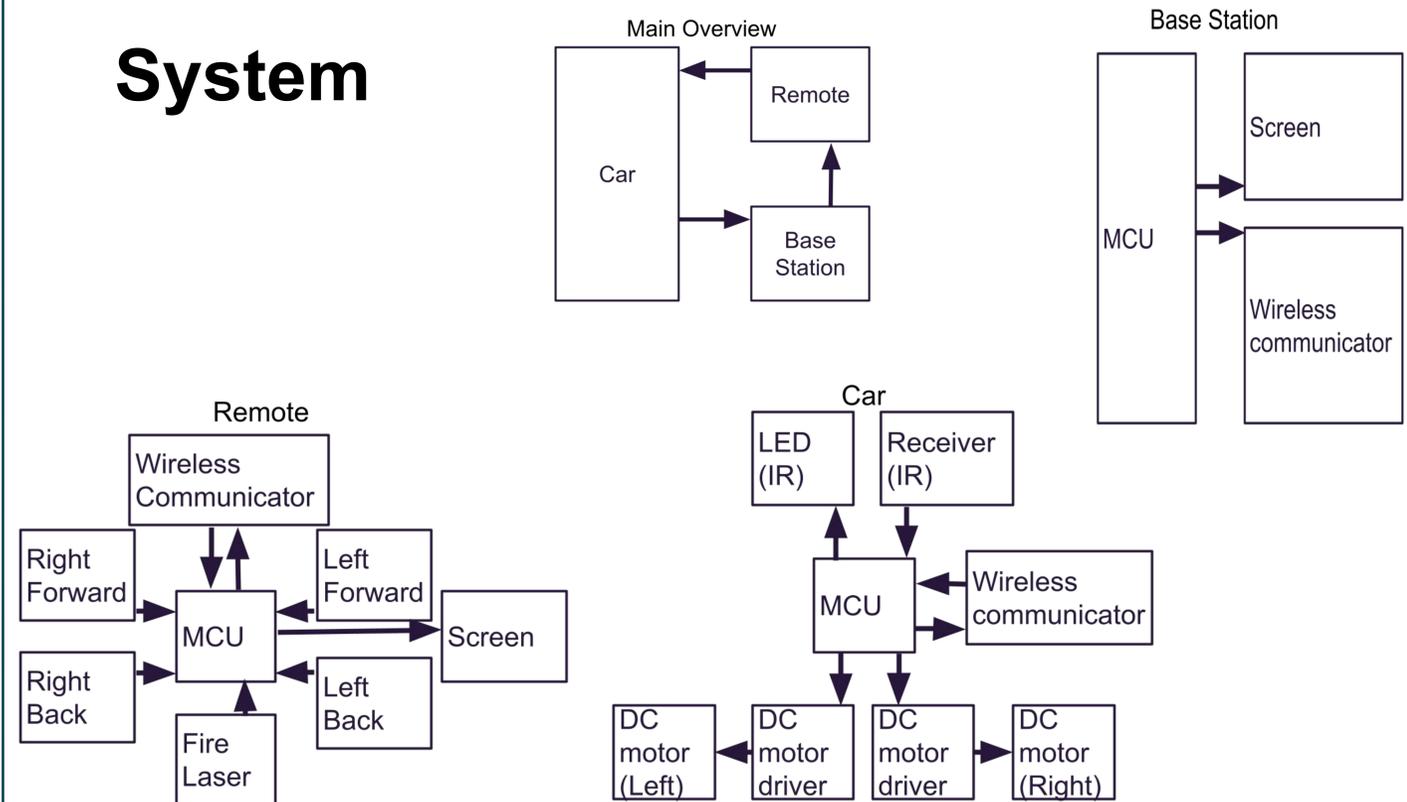
## Project

Purpose: Remote Control Cars are a lot of fun. Laser Tag is also a lot of fun. They are more fun if you can play them at the same time. This is the idea of Remote Control Car Laser Tag (RCCLT)

For this project there are three main objectives

- Design drivable remote control cars
- Make a way for the cars to shoot each other with lasers
- Create a way to keep score, which makes it more of a game

## System



## Methods

- Three Different Pieces
  - Remote
    - Five buttons to control the movement of the car
    - another button to fire the laser
    - screen to review the users score
  - Car
    - two DC motors to control movement
    - One IR emitter to fire the “laser”
    - Four IR receivers to see the laser
    - 3d printed chassis, turret, and wheels
  - Base Station/Scoreboard
    - wifi access point and web server to display scores on a website

## Conclusion

- The RCCLT met it's two goals.
  - Drivable remote control cars
  - playale game of laser tag
- Potential improvements
  - Add more cars to the system
  - Increase the accuracy of the lasers
  - change the design of the cars
- Leasons Learned
  - It is important to know the voltage requirements of volage regulators
  - For IR light to be focused into a laser lens is the most optimal way
  - wireless communicaitons of the same frequency can scramble data