

ESP32 Radio lab



Intro

The purpose of this lab was to learn how to use an ESP32 Radio to send signals to issue commands to our drone. This lab was done using an ESP32 Radio, a breadboard, a 220-ohm resistor, and 8 LED lights. This lab was done by using the Arduino program to code the radio into a Wi-Fi server that ran a webpage with buttons that turned on specific LED lights when clicked.

Results

Pressing the "forward" button turns on the red "forward" LED light

Pressing the "backward" button turns on the red "backward" LED light

Pressing the "up" button turns on the clear yellow "up" LED light

Pressing the "down" button turns on the clear green "down" LED light

Pressing the "right" button turns on the green "right" LED light

Pressing the "left" button turns on the green "left" LED light

Pressing the "clockwise" button turns on the yellow "clockwise" LED light

Pressing the "counterclock" button turns on the green "counterclockwise" LED light

Pressing the "stop" button turns off any lights that are all ready turned on.