WIFI ROBOT

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Wifi Robot: A remote control car that can be driven over the internet or with a laptop (in future with smartphone based on Android) wirelessly from up to 500m away. It has a live-feed network camera so that it can be driven without line of sight and a horn so that you can honk at people (FPV).

Dron based on the Arduino microcontroller and dir320 router. Router very hacker-friendly in that it runs Linux and some of the hardware has been reverse engineered. A bunch of alternative firmware versions have been written for this router. The version that this project uses is the customizable Linux firmware Open-WRT.

The goal of this article is to give a high-level overview of the project and provide some implementation details of the software and electronics.

The WiFi control package interface program utilized a VB.net program in which we provide the source code. The program will control and monitor the robot via a RS232 connection. In the case of a WiFi robot, the RS232 connection is a virtual serial port connection. The control program interfaces with a custom control board that is programmed to match your robot's specifics such as motor controllers, encoders, sensors, relays, current monitoring, voltages, etc.

Developed a program for the microcontroller, to pc, is being developed for Android. Assembly is held firmware for the router.

Terms of mechanics, was soldered uart2com converter, voltage regulator, was held electronics soldering machine for use as motor drivers.

Using a simple r/c car with adding a network camera, router, heavier batteries, extra circuits, microcontrollers, we are solving problem with developing separate moving platform for our robot.

Price of a finished similar device in the store is close to $400. My project costs close to $100

Top Speed of a car is 15.5km/h.

This device can be used for many purposes. The robot can be used as a spy, a scout, as a field engineer (after create robot hand)

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