

Introduction to Inventions and Creations

The name of the work: The trouble shooter

Field: Electronics and Internet of Things

Source of inspiration for invention:

It originated from traffic--a new road was built around my grandmother' s house, but when I went back last time, it was found that the newly built road was broken. It turned out that many trucks were overloaded, causing huge damage to the road, and the overloading was driving to a great extent This affects the safety of truck drivers and other vehicle drivers, but the traffic management department cannot accurately identify whether the truck is overweight from the appearance, and it is difficult to manage.

Improve traffic--I plan to design an IoT-based overloaded traffic management device.

Production process:

- (1) Purchase circuit boards, small cameras, pressure sensors and other parts online;
- (2) Use programming software to write corresponding programs and test;

- (3) Connect and test the circuit board and various parts;
- (4) Manually split the pvc board into a road model;
- (5) Hide the connected circuit on the road model and fix it with hot melt glue;

The function of the work:

Design a gravity sensing device under the specific highway area, use the weight of the vehicle as a trigger switch to set a preset value, when the weight of the vehicle exceeds the preset value, start the camera on the ground to electronically record the information of the overloaded vehicle; capture the overload After the information of the vehicle, the photo is transmitted to the traffic management center in time to facilitate the relevant staff to deal with the violation vehicle; Through the notification of punishment cases, the occurrence of overload is virtually reduced.

Advantages of the work:

- (1) By means of penalties by compatriots, the trucks should not be overloaded to ensure the safety of drivers on the highway;
- (2) The truck is not overloaded, which can effectively protect the highway and reduce maintenance costs;
- (3) An automated working platform can reduce the difficulty of the traffic

management department;

Remarks:

1.This work can be tested in the agreed route to prevent the driver from reloading and overloading on the way;

2.Although this work is compulsory, it will also reduce the driver's income, but it is insignificant compared with the life safety of the majority of people, so the value and significance of this work is great.

